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ABSTRACT

This volume consists of a report of the President concerning the state of small businesses as well as the U.S. Small Business Administration annual report on small business and competition. Addressed in the President's report are the following issues: the role of small business in the economy; the foundations of small business policy; and problems and policies of particular interest to small business (including cyclical sensitivity, inflation, interest rates, access to capital, tax incentives, regulation, antitrust, federal procurement, export, and a small business data base). The U.S. Small Business Administration annual report consists of four chapters and seven appendixes dealing with various topics, including small business in the U.S. economy, current and historical trends in the small business sector, financial developments in the small business sector, the effect of federal policy on small business, the Small Business Data Base, as well as other sources of business information, minority-owned and female-owned businesses, small business provisions of the securities laws, analysis of the Economic Tax Recovery Act of 1981, federal procurement for small businesses, and federal agency small business offices. (MN)

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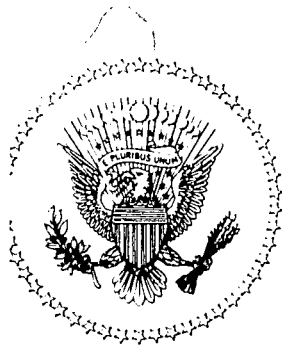
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The State of Small Business: A Report of the President

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Transmitted to the Congress

March 1982

TOGETHER WITH

THE ANNUAL REPORT ON SMALL BUSINESS
AND COMPETITION

OF THE

U.S. SMALL BUSINESS ADMINISTRATION

UNITED STATES GOVERNMENT PRINTING OFFICE

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**THE STATE OF SMALL BUSINESS:
A REPORT OF THE PRESIDENT**

THE STATE OF SMALL BUSINESS: A REPORT OF THE PRESIDENT

To the Congress of the United States:

The success of the American economy is critically dependent upon preservation of real opportunity for small business. Historically, small business has provided much of the growth in jobs and innovation as well as being the supplier of services and deliverer of goods to virtually every farm, village, town and city in our nation. Although there are many definitions of small business, the one agreed upon by the 1980 White House Conference on Small Business was that of businesses employing 500 employees or less. Currently, approximately 15 million businesses, or 99 percent, of the total number of businesses fall into this category.

Small businesses are a complex mixture of a wide variety of ownership types, sizes and locations. Published statistics from the Internal Revenue Service show that most small businesses are sole proprietorships. Still, significant numbers of partnerships and corporations are also small. Bureau of the Census statistics show that small businesses appear in all industry categories: manufacturing, transportation, insurance, wholesale and retail trade, and every other kind of industry. Small businesses vary in size: many have no employees (reflecting either family owned and operated or individually owned and operated businesses); over two million have between one and 20 paid employees. They are located all across our nation; many are in our large cities but a significant portion are in small towns. In truth, our small businesses are as diverse and disparate as our population.

This Administration is committed to assuring unrestricted access for small business to all segments of our economy. By unleashing small business from the burdens of unnecessary taxation and regulation, we enable men and women small business owners to increase their contributions to our society's economic and employment growth. In addition, we will continue to help expand the opportunities of today's struggling business aspirants, disadvan-

tagged ethnic and racial groups, and to blend their skills and abilities in creating a better life for themselves and a stronger America.

It is the objective of this statement to describe how this Administration is establishing an economic environment conducive to small business formation and growth. It first describes the economic contributions of small business. Second, it explores the foundations of this Administration's small business policies. And last, examines problems and policies of special interest to small business.

This statement draws from the accompanying *Report on Small Business and Competition* which contains data and information provided by the Small Business Administration.

1. THE ROLE OF SMALL BUSINESS IN THE ECONOMY

The roots of the American economy are to be found in the history of small business. In America's early years virtually all businesses were small. It was not until the advent of the industrial revolution in this country that large businesses emerged to take advantage of economies of scale in production, distribution, and marketing. Since the 19th century, the share of our national output of goods and services accounted for by small business has declined. The decline leveled off during the 1950's, with small business responsible for producing just over half of all private production. In the early 1960's, small business' share began another decline, and today it is responsible for slightly less than half of the production of goods and services in our economy. Clearly, the recent turmoil experienced by our economy also has taken a toll on the fortunes of small business.

Despite these trends, small business plays a key role in the U.S. economy. The contributions of small business to innovation and employment have been particularly noteworthy. In 1976, research for the National Science Foundation showed small business had been a more prolific source of innovations per research and development dollar than medium or large business. Inventors have often chosen to market their innovations through small business. Small business is, after all, ideally suited for such ventures by virtue of its greater flexibility and greater willingness to assume substantial risks in the pursuit of potentially large rewards.

Most small firms are labor intensive, and over half of our labor force is currently employed by small businesses. Small businesses remain among the leaders in employment creation. According to research at the Massachusetts Institute of Technology, between 1969 and 1976, more than 86 percent of new jobs were provided

by small businesses employing fewer than 500 employees. Some 80 percent of new jobs were provided by firms having 100 employees or less. Almost 66 percent of the new jobs were provided by businesses with fewer than 20 employees, and of the jobs provided by small businesses, 75 percent were attributable to firms that were less than five years old.

Small business has also played an important role in providing economic opportunities for minorities and women, both as employees and as entrepreneurs. Minority-owned business enterprises are predominately small businesses. Minorities control about 4 percent of all businesses and are concentrated in industries affording easy entry such as retail trade, services, and construction. Women control about 5 percent of all businesses and are also in those industries affording easy entry.

Given our nation's economic difficulties we cannot afford to ignore the resources and potential contributions of small business enterprises. Their innovative spirit, their flexibility to meet new challenges, are crucial to our economic progress. At the same time, the employment and entrepreneurial opportunities presented by this sector are too important to be less than fully realized. The bottom line is quite straightforward: America needs small business formation and growth.

II. THE FOUNDATIONS OF SMALL BUSINESS POLICY

The basic problem of the United States economy is that it is not growing fast enough. Since 1973, the U.S. economy has grown at a real rate of less than 2.4 percent, barely two-thirds of the 3.8 percent real growth rate experienced from 1950 to 1973, and far below the 4.5 percent rate achieved between 1962 and 1969. Why are we not growing? An important reason is that sources of growth have been obstructed by past Federal policy errors. Those errors involve the tax code and its interaction with inflation, the excessive appropriation of resources by the government, and distortions in the use of resources by unwise government intervention in the workings of the free market.

The fundamental tenets of small business policy are thus quite clear. Government should promote a strong, vibrant, private economy with policies that primarily rely upon free market forces to organize and allocate our economic resources. Economic growth and full employment must be restored while reducing inflation and interest rates, and, at the same time, Federal impediments to the free and efficient use of resources must be reduced or eliminated.

The end result should be an economy characterized by free and open markets giving all of its participants the opportunity to contribute to, and share in, the high and rising standard of living such a system will produce.

The Economic Recovery Program

The cornerstone of our initiative for the small business sector is our four-part Economic Recovery Program. No other set of actions by this government is as likely to correct the errors of the past and have such a pervasive and lasting positive effect on small business. It consists of the following:

1. A cooperative effort with the independent Federal Reserve Board to achieve a moderate and steady monetary policy to end inflation. Our goal is to reduce high interest rates and remove disincentives produced by the interaction of inflation with the tax code.
2. A regulatory reform program to reduce the inefficiencies and enormous costs that are holding back production and raising prices.
3. An incentive-oriented tax policy designed to increase work effort, saving, and investment.
4. A stringent budget policy designed to return resources to the private sector for investment and growth.

Monetary policy has been aimed primarily at reducing inflation. Our goal is a moderate and steady growth of the money supply at rates consistent with stable prices. The excessive money growth of the 1970's has left us with double digit inflation. That inflation has increased interest rates to record levels. Lenders have had to add an inflation premium to the real interest rate in order to protect their principal from erosion. They have also had to add a risk premium to compensate for the increased uncertainty of sharp and sudden policy changes and wild market swings such as have occurred in the past three years.

Generally high interest levels, coupled with wide swings in interest rates, have been a source of special concern for small business. More stable monetary policy is needed to make financial markets more predictable and to prevent discontinuities in the availability of capital. This will result in lower, less volatile interest rates.

Regulatory relief is needed to reduce unnecessary costs imposed by government. Government regulations, including paperwork, have become a major source of market interference, reducing competition and efficiency within most industries. Moreover, regulations

often have disproportionately adverse effects on small businesses, and the result is all too frequently an impaired ability of small businesses to compete effectively.

Fiscal policy has been aimed at promoting real growth. Lower production costs and more goods on the shelves help combat inflation, but the main purpose of the tax and spending reductions is to improve the incentives to work, save, and invest. Over the years, inflation has destroyed incentives by raising marginal tax rates on individuals and businesses, thereby reducing the rewards to labor and capital. Both the business and personal tax reductions in the Economic Recovery Tax Act of 1981 (ERTA) are essential elements in restoring these rewards to promote growth.

Small business will benefit from the general individual *tax rate reductions* and the indexing of tax brackets after 1984. Millions of small businesses are partnerships, proprietorships and Subchapter S corporations, the income from which is taxed at personal rates. In addition, the personal rate reductions will help restrain increases in labor costs, a prime concern of labor intensive small businesses. Small businesses will benefit from other features of ERTA as well. Among the more important provisions will be the Accelerated Cost Recovery System, the ability to expense limited amounts of depreciable assets, increases in the Investment Tax Credit for used property, lower corporate tax rates for small businesses, increases in the allowance for accumulated earnings, and simplified last-in-first-out (LIFO) inventory accounting. The estate tax reduction in ERTA significantly enhances the ability of small, family-owned enterprises to be perpetuated beyond the present generation, instead of being liquidated to meet excessive estate tax obligations. Other important provisions include the expansion of the funding limitations of the Keogh Plan and individual retirement accounts (IRAs). These provisions are helpful to small business in that they allow for increased tax deductions for the more profitable businesses, and at the same time generate more capital for institutions to lend to small business.

Spending restraint is needed to return the real and financial resources now being absorbed by the government to the private sector for use in investment and growth. The capital needs of the private sector, and of small business in particular, have been squeezed by the growth of the government sector. The problem manifests itself most directly in the competition for funds in the credit market, where the growing deficits must be financed.

Deficits are the evidence of the deeper problem of growth of the

public sector. When purchases and financial claims of government increase relative to Gross National Product (GNP), it means fewer real and financial resources are available for use by the private sector to expand capacity and production. Improving access of small business to needed resources requires curtailing this government preemption of the country's work force, capital goods, raw materials, and productive capacity, as well as credit. Government spending "crowds out" the private sector's access to these resources whether that spending is financed by taxes or borrowing.

III. PROBLEMS AND POLICIES OF PARTICULAR INTEREST TO SMALL BUSINESS

Cyclical Sensitivity

By the very nature of their structure, resources, and to some extent the types of activities in which they participate, small firms tend to be highly susceptible to the ups and downs of overall economic activity. Small businesses have fewer resources than large businesses to survive cyclical downturns and are more likely to fail.

Return of economic growth, coupled with substantial moderation of inflation expected from implementation of our economic program, is therefore of particular interest to small business. In addition, reduction of the uncertainties associated with wide swings in Federal economic policy should result in a business climate more conducive to formation, growth, and success of small business ventures. Stabilization will pay dividends for us all but most particularly for small businesses because of their greater susceptibility to business cycles.

Inflation

For the men and women who own small businesses, inflation is a particularly serious problem. It earns this distinction essentially by exacerbating the other problems of small business, such as need for capital, the cost and availability of investment funds, and increased uncertainty concerning the behavior of the economy and the posture of economic policies. Small businesses often are in competitive markets where they tend to have little control over the costs they must pay and the prices they are able to charge, leaving them especially vulnerable to adverse price movements.

The economic program of this Administration should provide small business with relief from inflation in several ways. First, adherence to a policy of stable and limited monetary growth should eliminate the primary engine of inflation in our economy. Second, the improved incentives and reduced labor costs flowing from the

reduction in Federal personal income tax rates should result in improved labor productivity, a matter of great importance to small businesses given their tendency to be labor intensive. Finally, help in controlling other costs of doing business will be derived from the elimination of unnecessary and inefficient regulatory burdens. Taken together, therefore, our policies should reduce the extent of the inflation problem at the same time the ability of small businesses to cope with the inflation problem is being enhanced.

Interest Rates

Interest rates are also a very serious problem for small business. High interest rates cause severe cash flow problems which are particularly threatening to small businesses. The heightened sensitivity to high and volatile interest rates stems from the tendency of many small businesses to be undercapitalized and/or to be facing substantial capital needs to finance growth. The volatility of interest rates associated with the higher levels also works a hardship by raising the risk associated with investment and growth. The cost of capital is a significant cost of production, and wide swings in interest rates are easily capable of producing ruinous cost structures for small businesses. Moreover, the deductibility of interest expense is of less help to small businesses since they frequently generate insufficient income (particularly new ones just starting up operations) to take full advantage of the tax deduction.

As stated earlier, the key to lower, steadier, interest rates is a consistently lower rate of inflation. When the inflation rate is high, interest rates are pushed up directly by the need for an inflation premium to protect the real value of the loaned funds. In addition, the economic instability suggested by the presence of high rates leads to a larger risk premium as well. Because interest rates are clearly influenced by inflation, and because the rate of inflation depends heavily upon the growth rate of money, major improvement is expected through our policy of moderate growth of money and credit. Short term movements in interest rates may evidence little progress at first, as was illustrated early in the summer of 1981, but continued easing of inflation is evidence that conditions will improve as this policy is more firmly established.

Access To Capital

There are many impediments reducing access to adequate capital, and unfortunately some of these work to the particular detriment of small business. Saving in recent years has been depressed

by the interaction of inflation and the marginal tax rates. Inflation pushes taxpayers into higher income brackets which are subject to progressively higher rates of taxation. The result has been reduced incentives to save and to work. Small business has suffered not only from the general lack of saving, but also because entrepreneurs have historically looked to family and friends to supply the equity investment funds used as seed capital to form new businesses. When saving becomes difficult, these sources are materially diminished.

Small businesses also operate under something of a handicap in the competition for business funds. As mentioned earlier, small size translates into somewhat greater vulnerability thus raising the risk associated with any given investment in a small business. In addition, economies of scale tend to preclude small business participation from the more impersonal mechanisms of our financial system. Registration requirements associated with the public issuance of stock, for example, can only be afforded if the cost is spread over a large number of shares. In the same vein, loans from insurance companies, large banks, and other major sources of investment capital are rendered less economic by the costly information requirements required by the prospective lenders. Access of small businesses to investment capital is thus frequently limited to individuals and small banks which have a personal relationship with the entrepreneur.

Unfortunately, depressed saving rates and limited access are not the only problems. The past tendency of the Federal government to rapidly expand its claims on resources caused either the reduced saving rates when those claims were financed by taxation, or became a direct, competing claim on available saving if financed through deficits. That is, deficits themselves absorbed funds that would otherwise have been available for investment, making all access points to the flows of financial capital less able to meet the demands placed upon them by the private sector. Since small businesses have had relatively few access points, their hardship has been particularly acute.

The most fundamental policy to improve small business access to capital is the reduction of the governmental claims on resources expressed in the drive to curtail government spending. Spending restraint is the key element since either high taxes or borrowing would reduce the resources available to the private sector for investment and growth.

Understanding the implications of the deficits projected for the

next few years, however, is somewhat more complex. The deficit alone does not determine the amount of crowding out taking place in the financial market. What matters is the relationship between the deficit and the supply of savings needed to finance it. The first thing to note, therefore, is that the recently enacted tax reductions and the new higher Keogh Plan and IRA allowances will provide a powerful stimulus to saving. Business tax reduction for 1982, for example, will increase business saving; this is money that business will not need to borrow from financial markets. Personal tax reductions should promote substantial reallocation of income from consumption to saving, in addition to the normal saving increase from income growth alone. Year-over-year, there should be an increase in total private savings from 1981 levels in excess of 60 billion dollars.

The Economic Recovery Tax Act will improve small business access to capital in other ways as well. For example, the amount of earnings which may be retained in closely held corporations without being penalized by the accumulated earnings tax has been increased from \$150,000 to \$250,000. The change makes it possible for the men and women who own small firms to accumulate a larger amount of investment capital without incurring an accumulated earnings tax. Another feature of ERTA is an increase in the maximum number of shareholders in Subchapter S corporations from 15 to 25 plus allowance of certain kinds of trusts to be treated as shareholders in such corporations. The provisions strengthen the attractiveness and utility of the Subchapter S provisions.

Still, the pressing need among many businesses is for equity capital, not debt. Repayment burdens of large loans, regardless of whether government or private in origin, inhibit the growth and formation of new businesses, especially those owned by women and minorities.

We recognize the need that small business has for new mechanisms of constructive finance. We also recognize that some of the mechanisms available, such as participating debentures, may require accommodative tax changes if they are to be effective.

Federal economic and financial policy plays a crucial role in small business viability. Thus, it is important that Federal departments involved in these areas be consistently sensitive to small business needs. I am directing the Commissioner of the Internal Revenue Service to include representatives of small business in advisory groups which review administration of the tax system.

Changes in Federal policy affecting financial institutions will also

take into account the impact on small business needs. The trend of Federal financial reform movements has been toward providing a broader array of sophisticated financial services from strengthened and modernized institutions of all types in a competitive and cost minimizing market. These reforms should continue to insure further gains in services for depositors and borrowers of all sizes, at lowest possible cost, throughout the country as well as in financial centers. The result may well be the creation of important new access points for small business to the flows of investment capital.

Tax Incentives

The Economic Recovery Tax Act seeks to provide incentives to increase asset purchases as well as to encourage employment growth. Small business has less than one-fourth of total business assets, but employs over one-half of the work force. Asset-based tax incentives will provide some direct economic stimulation to small business.

As noted earlier, general reductions in the marginal personal income tax rates and tax indexing will be beneficial for small businesses. Since most small firms are labor intensive, their cost structures should benefit as the impact of the tax reduction helps restrain increases in labor costs. By reducing, if not eliminating, bracket creep, indexing will also moderate employee wage demands. Improvements in wage cost pressures will be realized by big businesses as well, but the labor intensive character of small businesses means this provision will be even more important in their case.

Small business will also benefit from the Accelerated Cost Recovery System included in ERTA. The direct share of this benefit going into small business, while important, may be relatively small since these firms use less depreciable property per dollar of sales. On the other hand, to the extent small businesses are suppliers to large capital intensive firms (and in many cases are producers of depreciable assets themselves), the capital investment favoring provisions of ERTA should improve the market and profit positions of major parts of the small business sector, e.g. firms in the construction industry.

Within ERTA there is also an extensive list of special provisions targeted specifically to small business. Small businesses will benefit from the lower tax rates on the two lowest income brackets, the simplification of LIFO inventory accounting, the increased allowance for accumulated earnings, more liberal treatment of stock op-

tion plans, the liberalization of Subchapter S provisions, expanded expensing of depreciable assets, the larger allowance for the investment tax credit on used property, and the expanded funding allowances on Keogh plans and IRAs. And family owned and closely held small business owners are assured of continuity of ownership through the liberalized estate and gift tax laws. The aggregate amounts of the tax relief afforded by these tax provisions can involve significant reductions in marginal tax rates and thus provide powerful incentives for growth and development.

Regulation

Major increases in business regulation began during the last decade. The Occupational Safety and Health Act, the National Environmental Protection Act, the Employee Retirement Income Security Act, and others, have served important national objectives but have also introduced distortions in the operations of the free market, impeded competition, and increased costs of the regulated businesses. Most of these regulations have stipulated the same compliance requirements for small business as for large corporations. The relative burden is much greater, however, because compliance costs cannot be spread out over larger quantities of output. In short, small business has found itself at a competitive disadvantage because of the existence of efficiencies of scale in regulatory compliance.

The problem is a particularly difficult one. On the one hand, regulations frequently address important social objectives which cannot be dismissed lightly. On the other hand, their application to small business is frequently of only marginal importance to the social objectives involved, or they are applied in ways which are inappropriate in a small business context.

Nevertheless, difficult as the job may be, this Administration is committed to a major effort in regulatory reform. The problem has been approached with a two-pronged effort: regulatory relief and use of regulatory flexibility. So far regulatory relief has been the major policy tool. During this first year, regulatory relief has been actively pursued in every regulatory agency and the number of new regulations issued has been significantly reduced.

The Presidential Task Force on Regulatory Relief has announced a number of existing regulations for in-depth Federal agency review which are considered by small businesses to be most onerous. Agencies will be expected, following their review, to propose changes in these regulations in order to lessen the regulatory

burden on America's small businesses. It also is timely to accelerate the review of all existing regulations imposed on the business sector to determine whether maximum flexibility is being provided to accommodate the uniqueness of small businesses. Legislation enacted by the last Congress, the Regulatory Flexibility Act, provides the mechanism for undertaking this effort. The objective will be to assure that existing regulations do not unnecessarily impede growth and development of small businesses. At the same time, we will keep in place those regulations that are beneficial to society—such as health and safety in the work place, and a healthy environment.

Full utilization of the provisions of the Regulatory Flexibility Act will be a principal theme of our regulatory reform efforts over the next three years. I will direct each Federal department and agency to accelerate the time for completion of the review of existing regulations as specified in the Regulatory Flexibility Act from ten to five years.

Regulatory flexibility may not be adequate to deal with the regulatory relief efforts that we have already launched in the areas of banking and finance. It is important that the interests of small business be given special attention. I am directing the Controller of the Currency and asking the Chairs of the Federal Home Loan Bank Board, the Federal Deposit Insurance Corporation, and the Federal Reserve Board to follow the Regulatory Flexibility Act guidelines for assessing the small business impact of their proposals for changing our financial institutions.

The Securities and Exchange Commission has already established an admirable record of proposing regulatory reform that will allow small business men and women to meet their equity capital needs more cheaply and easily through the issuance of equity securities. I encourage them to continue their activities.

In summary, four economic problems plague small business, cyclical sensitivity, inflation, interest rates and access to capital. We addressed these problems with our four part economic recovery program: Federal spending cuts, tax reforms, regulatory relief and stable monetary policy. The results are beginning to show—substantial decline in inflation, a start toward long-term decline in interest rates and increases in savings to expand the supply of capital. This is not the time to deviate from our program. We are breaking the back of stagflation. We have a solid economic program and we reject pleas for "quick fixes" like those used in the past. Our program will pull us out of this slump and put us on the road to prosperity and stable growth by the latter half of this year.

Small businesses rely upon the free functioning of markets to compete and prosper. Our antitrust laws—the Sherman and Clayton Acts—protect the competitive markets upon which our free enterprise system is based. The ability of our economy to remain free of illegal and anticompetitive practices is properly a major concern of small business.

Frequently, levels of concentration are considered an inverse barometer of the health of competition and the small business community. The concentration problem, however, may be somewhat less than meets the eye. One type of concentration, aggregate concentration (the extent to which productive assets, across all industries, are held by a limited number of firms of large size), has not been adequately documented because the statistics are less than perfect reflections of the exercise of control over establishments across industrial groupings.

Another type of concentration, market, or industrial, concentration (the extent to which total sales of a particular industry are concentrated in several or a few producers), may occur naturally where producers find economies of scale in production, distribution or marketing. History also reveals that market concentration has waxed and waned in many industries depending upon developments in technology.

There are numerous weaknesses in the statistics bearing on the concentration question. For one thing, they vary tremendously from industry to industry; the service sector is highly unconcentrated but growing, while the manufacturing sector is more concentrated and shrinking (as a share of GNP). Generalizations about market power are therefore quite difficult. Existing statistics on concentration ratios also tend to focus on manufacturing, ignoring the service, construction, and other sectors where small businesses predominate.

At the theoretical level it is also legitimate to question whether concentration ratios are, in fact, reasonable indicators of the degree of market power being wielded by the participants. Market power is, after all, determined by the availability of acceptable substitutes, barriers to entry, and the practical geographic limits of the market area. The sole dry-cleaner in a small remote town, for example, could conceivably exercise more market power than a major auto manufacturer facing international competition. In the final analysis then, it must be recognized that concentration ratios tell us

very little about the competitiveness of the markets within which small businesses operate.

Antitrust policy in general, and particularly merger policy, is the specific context in which the Federal government protects the economy from illegal combinations of market power. The interests of small business are best served by an economically sensible and clearly stated merger policy that carefully examines each specific transaction, and inhibits those transactions that clearly threaten to restrain competition. The Attorney General will vigorously prosecute anticompetitive behavior—including, where appropriate, the use of criminal sanctions—to protect competition and eliminate artificial barriers to entry. To the extent that Federal antitrust enforcement can influence competition, this Administration will use its enforcement powers consistently and without hesitation.

This Administration also recognizes that there is a variety of economic and governmental factors which contribute to the competitive capability of small business and perhaps influence the levels of concentration observed in the economy. Tax, regulatory, and fiscal policies appear particularly critical, and are areas over which the Federal government has major influence. Our primary mission in restoring a healthy economy and the premium for hard work and entrepreneurship, is to ensure that the unconcentrated small business sectors can continue to grow.

Research and Development, and Innovation

Innovation by independent, small firms is central to a natural reduction of industrial concentration. The Federal government is the largest single purchaser of industrial research and development in our economy. Until recently, government purchased more research and development than all other buyers combined.

In its pursuit of efficiency in research and development procurement, the government has gradually concentrated its purchases in larger firms and universities. As government budgets have become tighter, procurement officers have found it more immediately efficient to spend research and development funds in fewer large contracts rather than many small contracts. At a minimum, we need to assure that the internal efficiency achieved by such procurement practices are justified since the continuation of these practices will inevitably lead to increasing market concentration, at least among suppliers of contract research and development. Last fall, I indicated my support for Senate Bill 881, the Small Business Innova-

tion Research Act, as it was passed by the Senate. I call upon Congress to pass this Bill for my signature this year.

For small business firms, cash availability is a serious limitation on the amount of research and development they can undertake. The Economic Recovery Tax Act provides an incentive for research and experimentation by allowing a 25 percent tax credit for certain research and experimentation expenditures in excess of a three-year moving average base period. The credit will be in addition to the immediate expensing or 60 month amortization of research and experimentation expenditures permitted under present law. Thus, small businesses' ability to finance their own programs should be materially improved.

I have also requested the Attorney General to examine antitrust laws to ensure that they do not interfere with the ability of patent and copyright holders, including those in the small business sector, to reap the proper rewards for their innovative contributions.

Federal Procurement

The phrase "industrial policy" has come to mean some form of elaborate industrial planning. But our industrial policy is one of establishing and maintaining competitive markets. We remain convinced that this policy will encourage and support the viable small business sector of our economy. Consistent with this philosophy, the Administration is taking steps to encourage competition in the Federal sector.

Government Policy of Not Competing with Private Industry. The Administration has made a major priority the policy of withdrawing wherever possible from competition with private industry in providing goods and services to be used by the Federal government. Activities of all departments and agencies are being examined to see which can be converted to the private sector. For instance, in a review of 440 activities conducted by military departments, it was found that 264 of these, or 60 percent, could be turned over to private enterprise. As these and other requirements are filled by the private sector rather than government itself, a principal beneficiary will be small business.

Prompt Payment on Government Contracts. The Administration is taking action to ensure that payments are made promptly to Federal contractors. Small business contractors are least able to wait for payment and will gain the most from prompt payments by the government. Accordingly, we have directed that all government contracts contain clear and specific instructions as to the procedure to

be followed to obtain prompt payment. Further, contracts must now state precisely when the contractor can expect to be paid. Additionally, one of the criteria we will be using to evaluate Federal employees who are involved in the payment process will be their performance in paying government vendors promptly. Again, the Administration strongly believes that Federal contract payments should be made on time. Also, we agree with the basic concept of authorizing through law the payment of penalty interest when the government unreasonably delays payment of a bill.

Export

Export trade plays a vital role in our economy. In part, it brings social benefits of our society's technology to other nations of the world and it also benefits our people with increased employment and returns to investment and helps pay for our imports. Unfortunately, small business has not participated in this activity to the fullest possible extent. Thus, our existing foreign trade promotion efforts must be more conscientiously targeted to small businesses to assist them in access to foreign markets. I am directing the Department of Commerce in cooperation with the Small Business Administration to emphasize programs that encourage export promotion among small businesses.

Equal Business Opportunity

This Administration is committed to pursuing unrestricted access for all business persons to all segments of the economy. Clearly, women and minority community members represent the largest underutilized resource of economic activity in our nation today. We are committed to unleashing this potential by removing barriers to their participation in business ownership.

Capital availability for women and minority entrepreneurs continues to be a significant problem. This problem is being addressed at least partially by the Federal Trade Commission's recent actions to strengthen enforcement of the Equal Credit Opportunity Act.

Success of minority and women-owned business is dependent upon access to resources and knowledge of business management methods. The government has traditionally assisted minority and women business owners with management and technical assistance to help overcome social and prejudicial barriers.

In recognition of the importance of the minority business assistance programs, we have increased the program levels for SBA's Minority Small Business program and the Commerce Department's

Minority Business Development Agency for fiscal year 1982 as compared to fiscal year 1981. In addition, we are proposing to Congress that these program levels be maintained in fiscal years 1983 and 1984. This includes activities such as financing for Minority Enterprise Small Business Investment Companies (MESBICs). In addition, the SBA will direct a larger portion of its guaranteed loans toward minority business owners.

We intend to expand the level of services delivered to the minority business community by improving the quality and effectiveness of service. To accomplish this, the Cabinet Council on Commerce and Trade is reviewing all government assistance programs for minority business to determine how they can be made more efficient and effective.

This Administration is dedicated to the systematic elimination of regulatory and procedural barriers which have unfairly precluded women from receiving equal treatment from Federal activities, including those activities affecting the opportunities of women in business. The Attorney General is systematically reviewing Federal laws and regulations in order to identify gender-based discrimination. He shall, on a quarterly basis, report his findings to me through the Cabinet Council on Human Resources. The Task Force on Legal Equity for Women, which I created recently by Executive Order, will then be responsible for implementing changes ordered by me.

In addition, we will ensure that the Women's Business Enterprise program in the Small Business Administration remains an effective and vital force advocating on behalf of present and potential women business owners. Also, the Office of Women's Business Enterprise will emphasize equal credit opportunity for women business owners.

Small Business Data Base

Finally, it is apparent that the small business sector remains poorly documented in statistical data. Existing Federal data derived from administrative records and data collection agencies are simply not adequate for policy analysis and decision making. Yet, we are committed to reducing the paperwork burden of small businesses and therefore reject any proposal to add data collection mechanisms to those currently in existence. At the same time, existing Federal data may be better organized and coordinated among agencies to help build a data base more suitable for small business policy making. To this end, the proposal for Federal agencies to compile statistics on business size on a comparable basis

will enhance analyses of the small-business sector. We are planning for agencies to provide business size data on this uniform basis. Analysis of the small business sector would also be furthered by sharing of selected data among statistical agencies, and we are examining ways of accomplishing this within the constraints of privacy and confidentiality requirements.

SBA's data base, which is drawn from commercially available data, places no additional paperwork burden upon small business, allows maintenance of confidentiality commitments to small business, and provides policy relevant data. Thus, this data base must be continued and we have given it priority in our 1983 budget proposals. I am asking the Congress to enact my budget proposal for SBA's small business data base. Also, I am requesting the SBA to increase the resources allocated to this work and to include minority and women owned business data within its data base.

IV. SUMMARY AND CONCLUSIONS

In conclusion, the importance of the small business sector cannot and should not be ignored. For me, small business is the heart and soul of our free enterprise system. The small business sector has played, and continues to play, an important part in providing innovative drive and employment growth in the American economy. To help small business realize its full economic potential, this Administration is pursuing an economic policy aimed at getting the American economy growing again, together with programs designed to assure unrestricted access by everyone to economic resources and markets.

The essential parts of such an economic program are already in place. An effective mechanism for achieving regulatory reform has already been established. A policy of stable, moderate, monetary restraint must be followed. A fiscal policy calling for budgetary restraint coupled with important new tax incentives for work, saving, and investment is being put into practice. Moreover, within the context of this four part program, the major problems of particular interest to small business are being effectively addressed. These problems range from inflation, high interest rates, access to capital, and regulation to research and development, export and equal business opportunities.

This statement and the following report are the first presented to Congress as required in Title III of Public Law 96-302. It has been prepared to meet both the letter and intent of the law and provide a comprehensive description of the state of small business.

It is hoped the report will establish a spirit of cooperation with Congress to assist us in jointly pursuing economic growth and prosperity through our mutual recognition of the importance of small business in America.

Ronald Reagan

THE WHITE HOUSE,
March, 1982

THE ANNUAL REPORT ON SMALL BUSINESS
AND COMPETITION
OF THE
U.S. SMALL BUSINESS ADMINISTRATION

23

LETTER OF TRANSMITTAL


U.S. Small Business Administration

Washington, D.C., February 25, 1982

Mr. President:

The United States Small Business Administration herewith submits its 1982 Report on Small Business and Competition in accordance with the provisions of the Small Business Economic Policy Act of 1980. The Report was prepared by the Small Business Administration with the assistance of the Council of Economic Advisers.

Sincerely,

A handwritten signature in cursive script, reading "Donald R. Templeman". The signature is fluid and elegant, with a large initial "D" and a long, sweeping underline.

Donald R. Templeman
Acting Administrator

INTRODUCTION

Public Law 96-302 requires the President to report annually on the state of small business and competition. This is the first report under that mandate. As the first report, it concentrates on setting out the most recent and relevant evidence describing small businesses, including how many there are, where they are, and who owns them. The report describes changes in the economy and the small-business sector, and details the impact of Federal policy on small business.

Appendix A contains tables and charts which graphically describe the state of small business. The remaining appendices detail data collection efforts, describe progress being made by minority-owned and women-owned businesses, analyze the impact of tax and securities laws on small business, and provides information on Federal agency small business offices.

Further information about small business is available from the Small Business Administration in two publications: *Economic Research on Small Business: The Environment for Entrepreneurship and Small Business* and *Selected Abstracts of Completed Research Studies*.

ACKNOWLEDGMENTS: Many people participated in the planning, writing, and review of *The State of Small Business: A Report of the President*. The President's statement was prepared by the Small Business Policy Working Group of the Cabinet Council on Commerce and Trade. *The Annual Report on Small Business and Competition of the U.S. Small Business Administration* was written under the guidance and leadership of Frank S. Swain, Chief Counsel for Advocacy. The task was accomplished under the general direction of Thomas A. Gray, Acting Chief Economist and Senior Editor. Sheryl Swed was managing editor and senior writer. Bruce D. Phillips was primarily responsible for writing Chapters I and II, including the respective appendix tables, with assistance from William Whiston, Alice Cullen and David Hirschberg. Charles Ou had responsibility for developing Chapter III. Chapter IV was coordinated by Charles Cadwell with assistance from Doris Freedman. Expert editorial assistance was contributed by William Scheirer, Tony Robinson, Alice Cullen, Gyneth Jones, Douglas Fitzgerald and Nancy Ing. Bruce Phillips developed the Data Base

Appendix, with the assistance of Condee Harris of the Brookings Institution. David Hirschberg had primary responsibility for the Minority-Owned and Women-Owned Appendix. Gerald Feigen wrote the Securities Appendix. The Tax Appendix was developed by Robert Bolle and George Guttman. William Scheirer wrote the Procurement Appendix. Guy Steuart wrote the Federal Small Business' Offices Appendix. Primary staff assistance was provided by Joyce Evans, Kim Beverly, Roxi Prince, Revella Richards, Lynda Chaplin, Patricia Pinkett, and Harriett Lyles, with assistance from Jackie Vienne, Anita Hart and Elaine Delaney.

Representatives of several other agencies participated in review of the annual report. In particular, Dan J. Smith, White House Senior Policy Adviser in the Office of Policy Development, and Allen Parkman, Senior Economist, Council of Economic Advisers, provided consistent support.

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CHAPTER I

Small Business in the U.S. Economy

This chapter presents the most current information available on the status of small business and attempts to show how small business is often defined, how small firms are counted, and how they are distributed by industry and location.

Inadequate data on the small business community has been a long-standing concern to those who recommend or set policy for this important sector of the Nation's economy. In order to provide more information, Congress authorized the Small Business Administration (SBA) to prepare a Small Business Data Base. Chapter I of this report describes the existing data sources SBA has used for many years and explains how the Agency approached the challenge of developing a new data base. In addition, the concept of industry concentration is discussed in the chapter, using small firm shares of total industry employment or sales as measures of concentration. The concept of small business productivity and the inadequacy of this measure in determining the full contribution of small business to the Nation's economy is also included.

The chapter contains five sections:

Section I addresses the problems in defining small business, including drawing a distinction between "establishments" and "enterprises," and identifies the use of this concept in data collection by various Government agencies.

Section II is a discussion of the major sources of comprehensive business information in the United States. In particular, the strengths and limitations of each of the major sources are observed and available data on sales, employment, and assets are contrasted with other information.

Based on the definitions of Section I and the data sources outlined in Section II, Section III attempts to define *the* number of small businesses in the United States according to the various data bases. In particular, alternative defini-

tions are given using either employment, assets, or sales as a criterion.

Section IV refines the information presented in Sections I through III to an industry-specific basis. Data are presented on economic concentration at the state level. In addition, there is discussion of the productivity of larger versus smaller businesses.

Section V summarizes the main topics of the chapter.

SECTION I. MEASUREMENT OF THE BUSINESS POPULATION

An Overview

At the time of the founding of our country, virtually all business was carried out by small businesses. By one definition or another, a straight count of businesses would indicate that about 99 percent are still small. What has changed, however, is the share of total business associated with business entities in varying size groups. Over the course of time, the business community in the United States has evolved into what some have called a *dual* system or even a *dual* economy; that is, an economy of two separate sectors composed of a small number of large corporations and a large number of small businesses. In general, adequate statistics are collected on the small number of large corporations, but not on the large number of small businesses.

Of the approximately 14.7 million businesses that filed tax returns in 1977 (the latest period for which detailed data are available), basic statistical information is collected on less than one-half, or about 5.6 million businesses. There is much less information available on the remaining 9.1 million businesses, which comprise a significant part of the small business sector. The chart below shows the number of businesses on which data are collected.

Total business tax returns filed in 1977	14.7 million
Businesses on which detailed information is available	5.6 million
Businesses on which detailed information is not available	9.1 million

Of the 5.6 million firms, there are roughly 10,000 that operate on a national basis with more than 415,000 subordinate establish-

ments or places of business. These firms produce more than 62 percent of the country's total output of goods and services (GNP), and employ 44 million people, or 53 percent of the non-government American workforce.¹ Data on these 10,000 larger firms are readily available because almost all of them issue stock that is publicly traded. To keep the investing public fully informed, such publicly-traded companies must file quarterly statements with the Securities and Exchange Commission (SEC).

With the exception of the 10,000 enterprises mentioned above, most businesses can be identified as smaller businesses. Those firms with employees produce 38 percent of the country's total output of goods and services (GNP), and employ 37 million people, or 47 percent of the non-government American workforce. These businesses utilize space and capital equipment to produce and distribute a diverse array of goods and services for the American public and for export around the world. Data about this *smaller business* segment of the American economy are produced by a variety of public agencies on a periodic basis. These include the Internal Revenue Service (IRS), Bureau of the Census (Census), Bureau of Labor Statistics (BLS), Department of Agriculture (DOA), and other agencies. Thus, Government data provide detailed information on this particular segment of the business community.

However, very little information is collected on 9.1 million of the smallest businesses. Although these businesses file tax returns, direct access to their individual IRS records is prohibited. Further, these 9.1 million businesses are not surveyed on a regular basis by any Government agency.

To derive consistent measures of the small business sector of the United States economy, publicly available statistics from the IRS are compared with other established data sources from the Census Bureau and from the commercially available credit listing service maintained by Dun and Bradstreet, Inc.²

¹ The basic source of the enterprise and establishment data is the Small Business Data Base. As described in more detail in the text, microdata (data on individual firms) are developed and maintained by the SBA and are based on the Dun and Bradstreet Market Identifier (DMI) File. The source of the output figures is "Gross Product Originating in Small Business: Preliminary Estimates for 1963 and 1972," and "Gross Product Originating in Small Business: Preliminary Estimates for 1976 and Revised Estimates for 1972 and 1963," prepared for the SBA, Office of Advocacy by Joel Popkin and Company, December 1980.

² Due to legal restriction on access to individual firm records at IRS and Census, SBA relies on the business listing file of the Dun and Bradstreet, Inc. for data on individual firms. The confidentiality of such data is, of course, maintained.

Enterprises Versus Establishments: The Need for Enterprise Data

The most important distinction in small business discussions is the distinction between enterprises and establishments. Many counts of small businesses overlook this difference. Enterprises are businesses that are separately owned and operated. An establishment is the smallest unit in which business activity is conducted and on which statistical information is collected. Establishments may be branches of larger firms. Such branch establishments differ from separately-owned businesses of similar size in purchasing power, advertising coverage, management and control systems, technical resources, and access to capital and credit.³ Because of these differences branch establishments should be defined and discussed as part of the larger parent firm.

Most very small businesses are single establishments. As the size of a business increases to about 100 employees, the number of establishments increases to two establishments per enterprise. For companies with 1,000 or more employees, the ratio is 100 establishments per company. (See Tables A1.1 and A1.27.) Clearly, none of the establishments owned by very large firms can legitimately be considered small businesses.

To study connections between firms and establishments, it is necessary to have access to data on individual establishments and firms. Such data are considered confidential and are not released by Government sources. Comparisons, however, can be made using the SBA Small Business Data Base which contains microdata or data on individual firms.⁴

The distinction between ownership and location is very important in assessing the small business community for policy targeting. The Small Business Data Base is designed to make this distinction. Using 100 employees as the definition of a small establishment or a small enterprise, almost 49 percent of the employees in all industries listed in the Small Business Data Base are employed in small establishments, whether owned by small or large enterprises. (See

³ This enterprise-establishment relationship is complex. The degree of control exercised by the parent can vary considerably, as can the degree of support provided to subordinate establishments.

⁴ The microdata base consists of specific information on 3.7 million individual companies and 4.7 million individual establishments. It also lists sales and employment data. For a detailed description of the data base, see Appendix B, "The Small Business Data Base and Other Sources of Business Information: Recent Progress."

Table 1.1.) The remaining 51 percent of the employees are in large establishments owned by large enterprises. However, over 15 percent of the work force is employed in small establishments owned by large enterprises. In conventional establishment-based statistics this 15 percent of total employment, which is approximately 15 million workers, is generally reported as belonging to the "small business sector" when in fact these workers are employed in branches of large businesses.

Industry employment may also be determined for establishments and enterprises from SBA's Small Business Data Base. As illustrated in Table 1.1, data show that manufacturing is an industry in which most of the employment is in large establishments owned by large enterprises. Construction is an industry in which most of the employment is in small establishments owned by small enterprises. Finance, insurance, and real estate comprise a category in which employment is divided rather evenly among large establishments owned by large enterprises, small establishments owned

TABLE 1.1—*Distribution of Employment in Small and Large Enterprises by Industry Divisions, 1978*

Industry Division	[Percent]		
	Small Establishments Owned by Small Enterprises	Small Establishments Owned by Large Enterprises	Large Establishments Owned by Large Enterprises
Total	33.2	15.5	51.3
Agriculture, Forestry, Fishing	69.8	12.9	17.3
Mining	23.9	23.3	52.8
Construction	65.4	10.0	24.6
Manufacturing	14.7	10.9	74.4
Transportation, Communication, Utilities	20.9	19.2	59.9
Wholesale Trade	69.3	16.0	14.7
Retail Trade	54.5	20.3	25.2
Finance, Insurance, Real Estate	33.3	28.2	38.5
Services	31.0	14.6	54.4

Note: 100 employees has been used to define a small enterprise in this table. As discussed in more detail in this chapter, employment is the most common variable used to define the number of small businesses, principally because it does not have to be adjusted for inflation.

Sources: Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet Market Identifier File.

by small enterprises, and small establishments owned by large enterprises.

Geographic analyses are complicated by problems in data collection. Because of the difficulty in tracking the ownership of establishments, most Government agencies collect data on individual establishments. This behavior is exhibited by the Bureau of the Census in its annual County Business Patterns series, and the Bureau of Labor Statistics in its Employment and Earnings series. (See Section II.) In addition, because establishments may not be in the same city, county, or state as the parent enterprise, most regional business studies use establishment data. County Business Patterns is the most frequently used source for regional studies of business size. The microdata base of the Small Business Administration is the only small business research file that has the capacity to analyze both enterprises and establishments by geographic location. In this file each individual establishment is traced to its parent enterprise, as shown in Table 1.1.

Knowledge of the considerable number of small establishments owned by large enterprises is valuable in assessing the state of the American economy. It is important to note that many small establishments belonging to large enterprises participate in Federal programs originally intended for small businesses. For instance, urban revitalization programs tend to replace small firms with branches of large enterprises.⁵ Industrial revenue bonds originally intended to assist small businesses are often utilized by small establishments of large firms.⁶ Thus a large firm is able to participate through its branches in programs originally intended for small business.

A further problem exists with bank loan data which are important in research on the availability of credit to small business. Such loans are classified by the size of the loan, not the size of the enterprise. Consequently, small loans to branches of larger enterprises are indistinguishable from small loans to small companies. Changes in reporting methods are necessary if the role of small business is to be assisted as originally intended by the authors or originators of Government programs and policies.⁷

⁵ Cambridge Systematics, Inc., *Impacts of Downtown Revitalization Projects on Small Business* (Small Business Administration, September 1981).

⁶ *New York Times*, January 21, 1982.

⁷ This is particularly important in meeting the intent of Title III of the Small Business Economic Policy Act of 1980, P.L. 96-302.

Proprietorship, Partnership, or Corporation: Full-time Versus Part-time Businesses

In general, tax return data may give an overstated impression of the total number of functioning small businesses. Table 1.2 shows 11.3 million proprietorships, 1.1 million partnerships, and 2.2 million corporations. However, of the 11.3 million proprietorship returns filed with the IRS in 1977, over half, or 55.1 percent had gross receipts of less than \$10,000 and thus can be considered less than full-time enterprises. (See Table 1.3.) These part-time businesses, while difficult to distinguish, are numerically very significant. Because many of these firms are not surveyed by the Bureau of the Census, little additional information exists in Federal and private data files on them beyond a name, address, and sometimes a telephone number. Therefore, it is difficult to assess the role of such businesses in overall studies of concentration in the economy.⁸

SECTION II. MAJOR SOURCES OF DETAILED BUSINESS INFORMATION

There are three major sources of business information for enterprises: the Statistics of Income series from the IRS, Enterprise Statistics from the Census Bureau, and the Small Business Data Base from the Small Business Administration. The following is a summary of Table 1.2 that indicates the variance in coverage of these sources:

- Statistics of Income (IRS): 14.7 million businesses
- Enterprise Statistics (Census) 5.6 million businesses
- Small Business Data Base (SBA): 3.7 million businesses

While the above data include all sizes of businesses, it is important to understand why the differences among the series are large. This information will be particularly useful when the number of small businesses in the United States is defined from these alternative sources in Section III. Some of the basic coverage differences in these three major population data files are outlined below.

⁸ The SBA Office of Advocacy is augmenting the 4.7 million establishment Small Business Data Base by 2.5 million names from mailing list sources to study these part-time businesses in greater detail.

TABLE 1.2—Enterprises or Taxpaying Units in Selected Data Series by Industry Divisions

Industry Division (SIC)	Enterprise Statistics (1977)	Small Business Data Base (1978)	Statistics of Income (1977)			
			Total	Sole Proprietorships	Partnerships	Corporations
Agriculture, Forestry, Fishing (01-09)		98,578	3,363,816	3,177,180	121,042	65,594
Mining (10-14)	22,358	25,396	112,333	71,151	21,966	19,216
Construction (15-17)	1,190,789	540,749	1,278,034	994,072	69,217	214,745
Manufacturing (20-39)	296,146	337,223	483,273	224,128	27,996	231,149
Transportation, Communications, Utilities (40-49)		129,081	487,374	385,322	16,837	85,215
Wholesale Trade (50-51)	293,522	373,834	574,221	307,245	29,379	237,597
Retail Trade (52-59)	1,776,253	1,164,650	2,459,053	1,862,406	163,832	432,815
Finance, Insurance, Real Estate (60-69)		262,332	1,804,250	894,941	476,390	432,919
Services (70-89)	2,010,738	805,033	4,045,562	3,302,537	226,638	516,387
Not Allocable			132,985	126,634	101	6,250
Total	5,589,806	3,736,876	14,740,901	11,345,616	1,153,398	2,241,887

Sources: Department of Commerce, Bureau of the Census, *1977 Enterprise Statistics, General Report on Industrial Organization*, Table 3; Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet Market Identifier File. Department of the Treasury, Internal Revenue Service, *1977 Sole Proprietorship Returns*, Table 1.1; *1977 Partnership Returns*, Table 1.3 and *1977 Corporation Income Tax Returns*, Table 1.

TABLE 1.3—*Sole Proprietorships by Size of Business Receipts*

[Number]

Size of Business Receipts	All Industries	Agriculture, Forestry, Fishing	Other Industries
Total	11,345,616	3,177,180	8,168,436
Under \$2,500	3,286,039	1,020,799	2,265,240
\$2,500 under \$5,000	1,488,848	452,572	1,036,276
\$5,000 under \$10,000	1,480,824	412,882	1,067,942
\$10,000 under \$25,000	1,987,109	570,481	1,416,628
\$25,000 under \$50,000	1,294,447	358,086	936,361
\$50,000 under \$100,000	946,765	236,607	710,158
\$100,000 under \$200,000	526,868	89,120	437,748
\$200,000 under \$500,000	260,750	28,008	232,742
\$500,000 under \$1,000,000	53,111	4,781	48,330
\$1,000,000 under \$2,000,000	15,606	3,060	12,546
\$2,000,000 under \$5,000,000	4,378	623	3,755
\$5,000,000 under \$10,000,000	663	119	544
\$10,000,000 or more	208	42	166

Source: Department of the Treasury, Internal Revenue Service, 1977 *Sole Proprietorship Returns*, Table 1.3.

Internal Revenue Service Statistics of Income

IRS data furnish the most comprehensive measure of the number of businesses even though the data have important shortcomings. The IRS Statistics of Income Program provides detailed information by industry on the business population. These estimates were based on a sample and developed to supply information on the total number of business tax returns filed.⁹ Unfortunately, IRS and Census Bureau data are published two to four years behind the current calendar year.

The 1979 estimated total tax returns for all businesses is 16.2 million. This includes 12.3 million proprietorships, 1.3 million partnerships, and 2.6 million corporations. Because the latest IRS detailed statistics are for 1977 and show 14.7 million businesses in total, the IRS figures for 1977 are used for all analyses in this report. (See Table 1.2.) For comparisons of 1977 and 1979 data, see Table A1.2.

⁹ Robert A. Wilson and John DiPaolo, "Statistics of Income: An Overview," *Statistics of Income and Related Administrative Record Research* (Washington: Government Printing Office, October 1981).

Census Bureau Enterprise Statistics

Periodically, the Census Bureau conducts an economic census to survey the Nation's industrial and business activity. Beginning in 1967, an Enterprise Statistics survey has been conducted at five-year intervals for years ending in "2" or "7". The 1977 survey covers the following economic sectors: mining; construction; manufacturing; trade; and legal, medical, and selected services. Sectors excluded from the survey are agriculture, forestry, and fishing; transportation, communications, and utilities; finance, insurance, and real estate; and the remainder of the service industries. Because Enterprise Statistics omits a number of sectors, the data in this series must be supplemented by other sources. Therefore, in Sections III and IV, Census data are compared with enterprise data from the Small Business Data Base which covers all industries.

Basically, the IRS Statistics of Income and Census Enterprise Statistics are obtained from the same source. The names and addresses used by the industrial censuses of business are obtained from the IRS business tax reports described above. However, Enterprise Statistics differ in their coverage and scope from the Statistics of Income, and their definitions of enterprises differ.

The same basic sources of information are used for Enterprise Statistics as for County Business Patterns, which is also prepared by the Census Bureau. The latter includes all nonfarm private sector establishments that report employment, except railroads. County Business Patterns reports data on payrolls and on the number of establishments by employment size of establishments. Ownership status of establishments is identified in Enterprise Statistics but not in County Business Patterns.

Small Business Administration Small Business Data Base

Recent amendments to the Small Business Act (P.L. 94-305 and P.L. 96-302) called for the creation of a small business data base for use in a wide variety of policy analyses. In response, the Small Business Administration purchased a data file that could analyze individual businesses: the Dun and Bradstreet Market Identifier (DMI) File.

As the cornerstone of the microdata base of the Small Business Administration, the DMI File contains information on business organizations that showed financial activity in any given year. Each record in the file contains detailed name and address information,

including a set of geographic codes, detailed major industry codes, secondary industry codes, and employment and sales codes. Pointers and codes within the file indicate if the report is for a single-establishment business or if it reflects part of a larger business organization.

The DMI File presents two important problems. First, the firms in the file are neither a census of all firms in the United States nor a random sample. Thus it is necessary to validate or "benchmark" the files against appropriate sources to be certain that the information drawn from the files accurately describes small business in total. In this chapter, the benchmarking is done against the Enterprise Statistics of the Bureau of the Census. Second, the files are not assembled from a random sample, but by voluntary cooperation of respondents. Progress on overcoming these problems in detailed in *U.S. Establishment and Enterprise Microdata*.¹⁰

SBA is in the process of linking current enterprise and establishment files. A mechanism has been developed to identify an establishment with its corporate "parent" to determine if the establishment is a branch or subsidiary of the parent company, or an independently owned business.

The Three Major Data Sources Compared

In summary, Table 1.2 compares the total number of businesses by industry from three sources: Bureau of the Census (Enterprise Statistics), Internal Revenue Service, (Statistics of Income), and the Small Business Administration (Small Business Data Base). By any count of businesses, 98-99 percent are small.

These various sources of business data serve different program purposes and cover varying populations. The data source used for statistical explanations is determined by the research problem at hand, the timeliness of the data required, and the industrial and geographic requirements.

*Number of Minority-Owned and Women-Owned Businesses*¹¹

In recent years the number of businesses and the share of total receipts have increased for both minority-owned and women-

¹⁰ This report was produced by the Brookings Institution for the Small Business Administration in August 1981 and is unpublished. However, copies are available upon request from the SBA Office of Advocacy. See Appendix B of this report for a description of the Small Business Data Base.

¹¹ See Appendix C for a further discussion of both minority-owned and women-owned businesses.

owned businesses. Minority-owned businesses are estimated by the Bureau of the Census to account for 5.7 percent of the total businesses in the United States and for 3.5 percent of total gross receipts.¹² These percentages represent an increase of 31 percent in the number of firms and 69 percent in gross receipts from 1972 to 1977, as compared to an increase of 62 percent in GNP.¹³ Table 1.4 compares the number of firms and receipts by selected industry for minority-owned firms with all United States firms for 1977.¹⁴

TABLE 1.4—*Firms and Receipts of Minority-Owned and All United States Firms by Selected Industry Division, 1977*

[Firms, Thousands; Receipts, Billions of Dollars]

Industry Division	Firms			Receipts		
	[Minority-Owned]			Minority-Owned]		
	Total	Number	Percent	Total	Amount	Percent
Total	9,440 ¹	518 ²	5.5	612.0	21.3	3.5
Construction	1,107	53	4.7	72.6	2.1	2.9
Manufacturing	287	13	4.2	38.5	0.9	2.3
Transportation, Communications, Utilities	419	37	8.6	22.8	0.9	3.9
Wholesale and Retail Trade	2,600	156	6.0	29.4	10.8	3.7
Finance, Insurance, Real Estate	1,404	28	2.0	66.6	0.7	1.1
Selected Services	3,623	234	6.5	120.1	5.9	4.9

¹Includes only sole proprietorships, partnerships, and small (Subchapter S) business corporations. For comparability purposes this table excludes minority-owned firms filing Form 1120 tax returns (corporations other than Subchapter S small business corporations).

²Excludes unallocated firms and firms in "other industries."

Sources: Department of Commerce, Bureau of the Census, *Survey of Minority-Owned Business, 1977*. Sole proprietorship and partnership data based on Internal Revenue Service, *Preliminary Report, Statistics of Income, Business Income Tax Returns, 1977*. Small business corporation data based on Internal Revenue Service, *Preliminary Report, Statistics of Income, Corporation Income Tax Returns, 1976*. IRS data are adjusted to exclude industries not covered by the Census survey of minority-owned firms.

¹²Bureau of the Census, *Survey of Minority-Owned Business, 1977* (Washington: Government Printing Office, 1981).

¹³There are some indications that the data overstate the growth of minority business. See Norman Hurwitz, William Tuck, and Richard L. Stevens, "A Review and Critique of the 1977 Survey of Minority-Owned Business Enterprises" (Minority Business Development Agency, June 1981).

¹⁴Large corporations are excluded in Tables 1.4 and 1.5 because the minority-owned and women-owned proportion could not be determined from public records.

Women-owned firms are estimated to account for 7.1 percent of total businesses and 6.6 percent of total gross receipts.¹⁵ These percentages represent an increase of 30 percent in the number of firms and an increase of 72 percent in gross receipts for the same period, 1972-1977. Table 1.5 illustrates the number of firms and receipts by selected industry divisions for women-owned businesses compared to all United States firms for 1977.

TABLE 1.5—*Firms and Receipts
of Women-Owned and All United States Firms
by Selected Industry Divisions, 1977*

[Firms, Thousands; Receipts, Billions of Dollars]

Industry Division	Firms			Receipts		
	[Women-Owned]			Women-Owned]		
	Total	Number	Percent	Total	Amount	Percent
Total	9,440 ¹	662 ²	7.0	612.0	40.4	6.6
Construction	1,107	21	1.9	72.6	2.9	4.0
Manufacturing	287	19	6.6	38.5	3.6	9.4
Transportation, Communication, Utilities	419	12	2.9	22.8	1.3	5.7
Wholesale and Retail Trade	2,600	228	8.8	291.4	23.4	8.0
Finance, Insurance, Real Estate	1,404	66	4.7	66.6	2.1	3.2
Selected Services	3,623	316	8.7	120.1	7.1	5.9

¹ Includes only sole proprietorships, partnerships, and small (Subchapter S) business corporations. For comparability purposes this table excludes women-owned firms filing Form 1120 tax returns (corporations other than Subchapter S small business corporations).

² Excludes unallocated firms and firms in "other" industries.

Sources: Department of Commerce, Bureau of the Census, *Women-Owned Businesses, 1977* and sole proprietorship and partnership data based on Internal Revenue Service, *Preliminary Report, Statistics of Income, Business Income Tax Returns, 1977*, small business corporation data based on Internal Revenue Service, *Preliminary Report, Statistics of Income, Corporation Income Tax Returns, 1976*. IRS data are adjusted to exclude industries not covered by the Census survey of women-owned firms.

SECTION III. SMALL BUSINESS DEFINITIONS: EMPLOYMENT VERSUS SALES

In the discussions below, some of the varying business counts are

¹⁵ Bureau of the Census, *Women-Owned Businesses, 1977* and *Selected Characteristics of Women-Owned Businesses, 1977* (Washington: Government Printing Office, 1981).

related to more general statements on concentration in the United States economy and define small firms on both a sales and an employment basis. All of the information below, however, is based on the approximately 5.6 million enterprises for which there is detailed statistical information.

It was noted earlier that the IRS provides the most comprehensive count of the number of businesses, and that in these data the major variable of sales is used to study the overall distribution of businesses and industry concentration.¹⁶ However, sales is not always the best variable to use for analyzing business distribution and concentration.

The principal objection to the use of sales data is that sales size categories must be adjusted for inflation. Therefore, a given sales size category that is currently considered a large business may not be judged to be a large business in the future. Because it is important to use a sufficiently long period of time to study trends in the structure of the economy, distribution of business size by the number of employees is the preferred variable.

The relationship associating employment definitions of business size and sales definitions of business size is depicted in Table 1.6. The table shows that businesses of under 100 employees often have sales of less than \$10 million, while those with under 500 employees may have sales of \$25 million as an upper limit. Average firm size tends to be somewhat higher in industries in which a larger scale of output is required to reach minimum average cost, as in manufacturing. In other industries, such as retail trade, a smaller scale of activity achieves minimum average cost. By necessity small business definitions are industry-specific.

While the physical output of firms is really the measure that should be used to study economic concentration, measurement difficulties require that the less precise sales and employment concepts be used. Because there is no output measure that applies to all industries, approximate links between sales and employment must be used to describe the phenomenon. Therefore, it is difficult to make precise statements regarding economic structure, and to provide a definitive numerical definition of a small business applicable in every industry. For example, excluding from a business count firms with less than \$5,000 in gross receipts (from IRS data), or those with no paid employees (from Census data), becomes somewhat arbitrary.

¹⁶ For partnerships and corporations in the Statistics of Income Program, asset information is also available to study the distribution of businesses.

TABLE 1.6—*Business Size Standards for Employment, Sales, and Assets and Asset Categories From the IRS Corporate Source Book*

[Employment, Numbers; Sales or Assets, Thousands of Dollars]

Business Size	Employment ¹	Sales or Assets ¹	IRS Corporate Source Book Asset Categories
Family	0–4	0–499	(1–99, 100–249, 250–499)
Small-Small	5–19	500–2,499	500–999
Small-Medium(1)	20–49	2,500–4,999	1,000–4,999
Small-Medium(2)	50–99	5,000–9,999	5,000–9,999
Small-Large	100–499	10,000–24,999	10,000–24,999
Large-Small	500–999	25,000–49,999	25,000–49,999
Large-Medium	1,000–4,999	50,000–249,999	(50,000–99,999, 100,000–249,999)
Government Sized	5,000+	250,000+	250,000+

¹ A more detailed version of these size classes was adopted by the Inter-Agency Committee on Small Business Statistics, and published in the *Federal Register* for comment December 1980 and in the *Statistical Reporter*, August 1980.

Sources: Department of Commerce, Office of Federal Statistical Policy and Standards. *Statistical Reporter*, Vol. 81–3, December 1980 and Internal Revenue Service, "Corporate Source Book."

It should be noted that many concepts other than sales or employment may be used to define a size distribution of businesses. These include assets, payroll, or value-added. However, because of the partial industrial coverage of such data, or the inability to identify the reporting unit precisely, these definitions cannot be applied to all industries.

The appropriate measure of the size distribution of businesses is determined by the policy being studied. Employment appears to be the best overall measure of company size because of its more general availability and its invariance with respect to the inflation rate.

SECTION IV. CONCENTRATION BY INDUSTRY

Small Firm Shares of Employment and Sales by Industry

Concentration in economic activity can be observed from several bases that include the percentages of companies, employees, and sales accounted for by a given size group. The most appropriate

measure is a function of the policy being considered. For example, since companies pay taxes on revenues generated (less deductions), sales may be the most useful variable when discussing tax policy. Similarly, during discussions of policies affecting the labor force, such as the level of employment growth or expansion opportunities in key industries, classification by number of companies or number of employees might be the most appropriate.

Summary indicators that apply when a small business is defined as a business employing less than 500 employees are shown in Table 1.7. Small firms, based on data including virtually all of the 5.6 million firms for which data is collected, plus some portion of the remaining 9.1 million firms for which data is not collected, account for about one-half of total employment and a somewhat smaller share of sales and GNP.

In 1978 there were about 13,000 companies with 500 or more employees.¹⁷ These companies, about 0.2 percent of all companies with employees, accounted for roughly one-half of total sales and one-half of total employment. The other 99.8 percent of the companies with fewer than 500 employees contributed the other one-half of the sales and employment totals. In the industry-specific analysis below, the reference points of "one-half the sales" and "one-half the employment" are used to indicate how major industries differ.

Virtually all companies are small companies whether 100 employees or 500 employees is used to define small firms. (See Table A1.3.) There is little variation to this tendency, since over 95 per-

TABLE 1.7—Activity Shares of Firms With Less Than 500 Employees, 1976-78

Measure	Percentage of total
Number of Companies (1978) ¹	99.7
Gross National Product (1976) ²	38.0
Private Sector GNP (1976) ²	44.0
Employment (1978) ¹	46.8
Payroll (1977) ³	46.0
Gross Revenues (1978) ¹	42.7

¹ Small Business Data Base. The comparable figures from Enterprise Statistics are 52.5 percent of employment and 52.6 percent of receipts.

² Joel Popkin and Company, "Gross Product Originating in Small Business, 1963 to 1972" (March 1980)

³ Department of Commerce, Bureau of the Census, County Business Patterns, 1977, Enterprise Statistics. This contains a special analysis based on the 1977 Economic Census.

¹⁷ Analysis by the Brookings Institution of the Small Business Data Base, August 1981.

cent of the companies in each major industry group are small. However, if the sales and employment shares of companies with less than 100 or 500 employees in the industries traditionally dominated by small firms are compared to the more concentrated sectors, certain differences emerge. Table 1.8 displays sales and employment shares in five traditionally small business industries: agriculture, forestry, and fishing; construction; wholesale trade; retail trade; and services. In each industry, firms with less than 500 employees dominate, that is, they contribute more than one-half of the sales and more than one-half of the employment. The small business contribution to employment and sales is much lower in other industries: about 20 to 30 percent of employment and 10 to 25 percent of sales, varying by industry. In the most concentrated industries of mining and manufacturing, for example, small firms with less than 500 employees contribute less than 10 percent to sales, while providing more than 20 percent of the jobs. (The aggregate data are found in Table A1.4. The industry-specific sales and employment data are found in Tables A1.24 and A1.30.)

In Table 1.8, the relationship between sales and employment shares is rather close in the five industries that traditionally have been dominated by small firms. In the construction industry, for example, companies with less than 100 employees account for 68.9 percent of the receipts and 70.0 percent of the employment. This is the industry most dominated by small firms. In these five industries, small firms dominate least in services, which is the fastest growing sector in the economy.

In the service sector, however, a unique phenomenon is found. In the four other industries that have been discussed, the sales share is always smaller than the employment share, indicating that sales per employee tend to be smaller in the small business sector than in larger firms. However, the service industry is the exception to the above generalization. In it, the sales share accruing to small firms exceeds the employment share. As shown in Table 1.8, service businesses with less than 500 employees contributed 51 percent of the jobs in that sector in 1978, and received 62 percent of the receipts, while service firms with less than 100 employees accounted for only 32 percent of the employment, but 45 percent of the sales. This seems to imply that small service firms in such fields as business services, medical services, and legal services have higher sales per employee. Enterprise Statistics data confirm this observation.

As discussed in more detail in the next chapter, there are reasons for suggesting that the future growth of small firms may be con-

TABLE 1.8—*Employment and Sales Shares in
Traditional Small Business Industry Divisions
for Firms With Less Than 100 Employees and 500 Employees, 1978*

[Percent]

Employment Size Class	Selected Industry Divisions				
	Agriculture, Forestry, Fishing	Construction	Wholesale Trade	Retail Trade	Services
Small Firms as Percent of Total Number of Firms					
Less than 100	95.1	99.3	98.9	99.3	97.2
Less than 500	105.0	99.9	99.9	99.9	99.4
Small Firm Share as Percent of Total Employment					
Less than 100	66.8	70.0	68.5	56.8	32.0
Less than 500	76.6	83.7	83.0	65.8	51.3
Small Firm Share as Percent of Total Sales					
Less than 100	62.0	68.9	59.1	56.5	44.8
Less than 500	69.7	82.6	74.5	65.5	62.1

Source: Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet Market Identifier File.

concentrated in the service sector. This may be a sector where economies of scale are not as prevalent as they are in manufacturing, for example.

The concentrated sectors of the economy in terms of their sales and employment shares are the transportation, finance, manufacturing, and mining industries. In those industries, a relatively few companies contribute most of the sales. In the traditional small business industries, small firms generally contribute more than one-half of the sales; however, with the exception of services, the employment share always exceeds the sale share.

Establishments Per Larger Company

The very large multiestablishment companies are often dispersed geographically. Data also show that in many cases those states where industries are concentrated tend to produce the country's output in larger units of production due, at least in part, to the density of population.

Table 1.9 shows the number of branch establishments associated with larger companies of 1,000 employees or more. Data from two

sources are compared: the Small Business Data Base from the SBA and Enterprise Statistics from the Bureau of the Census. Although the Census Bureau does not include all of the industries covered by the Small Business Data Base, both sources show that retail trade is the most dispersed sector. The average retail firm of 1,000 employees or more has between 116 and 249 establishments, depending upon the classification of leased departments in retail stores and upon the imputation of establishments. Following retail trade are the more concentrated sectors of finance, insurance, and real estate; and mining, with over 70 establishments in the average larger firm. In descending order, the least dispersed sectors are transportation, communications, and utilities; wholesale trade; manufacturing; construction; agriculture, forestry, and fishing; and services.

Because small firms tend to be more locally concentrated, it would be expected that industries in which small firms dominate would have fewer establishments, on average, associated with them. In Table 1.9 this assumption is depicted for agriculture, construction, wholesale trade, and services. Only in retail trade, which is dominated by small firms, is there a very large number of establishments in the largest companies. Perhaps this is due to the mass merchandising and branching ability of the biggest companies. In

TABLE 1.9—Number of Establishments Per Company
By Industry Division for Companies With 1,000 Employees or More

Industry Division	Small Business Data Base (1978)	Enterprise Statistics (1977)
Agriculture, Forestry, Fishing	39.2	NA
Mining	73.6	67.2
Construction	43.6	24.3
Manufacturing	55.1	78.5
Transportation, Communication, Utilities	67.3	NA
Wholesale Trade	66.7	48.5
Retail Trade	116.2	249.3
Finance, Insurance, Real Estate	74.9	NA
Services	19.2	69.6 ¹

¹ The selected services covered by the economic censuses are listed in Appendix C of the 1977 *Enterprise Statistics*.

NA = Industry not covered.

Sources: Small Business Data Base and Department of Commerce, Bureau of the Census, 1977 *Enterprise Statistics*, General Report on Industrial Organization, Table 3.

manufacturing, mining, and finance, the more concentrated industries, there are a larger number of establishments per thousand employee enterprises than in most small business industries.

Employees Per Company by State

The number of employees per company by state could vary according to the concentration of its major industries and the extent of that concentration within a given state. For example, in a state with a greater prevalence of service industries, which are not particularly concentrated and in which economies of large scale production are not as applicable, fewer employees per company would be expected.

The Small Business Data Base is used to describe firm size by state since Enterprise Statistics does not list firms by region. Table 1.10 shows the 10 states with the largest average number of employees per firm, and the 10 states with the smallest average number of employees per company. (Because the District of Columbia has a heavy concentration of Government employees, it has been excluded from the analysis.)

The states listed in the upper half of Table 1.10 are among the slowest growing states while those listed in the lower half are among the fastest growing states. The growing areas of the economy in many states are characterized by large increases in small business activity. Some of the small businesses that are very active in the fastest growing states are also characterized by a small average firm size. These small businesses may be found in industries such as health and leisure services in Florida and New Mexico; the vacation home manufacturing industry in Vermont and Mississippi; and extractive industries in Wyoming and Alaska. As delineated in the next chapter, states with higher average firm size tend to be those in the more mature regions of the Plains, Middle Atlantic, and Midwest, while those states with the smallest average firm size tend to be in rapidly growing areas in the Southern and Western parts of the United States.

It is difficult to assess the effects of the changing concentration and shifting industry mix with the currently available data. For example, the growth of mining in some states may well result in a decline in the sales and employment shares of small firms due to the possibly increasing concentration of economic activity in that industry. In contrast, the growth of services in states like Florida and New Mexico may well reflect some increase in the sales share accruing to small firms. When the Small Business Data Base has

TABLE 1.10—Rank of Ten States With the Largest and Smallest Number of Employees Per Company, 1978

Rank	State	Largest Number	
		Employees/Per Company	
1	Delaware	51.0	
2	Connecticut	47.0	
3	New York	41.0	
4	Michigan	32.0	
5	Illinois	30.3	
6	Ohio	28.0	
7	Pennsylvania	23.5	
8	Minnesota	23.5	
9	Massachusetts	21.9	
10	Missouri	21.4	
		Smallest Number	
1	Colorado	8.6	
2	Alaska	8.8	
3	Wyoming	9.7	
4	Vermont	10.7	
5	North Dakota	10.7	
6	South Dakota	11.2	
7	New Mexico	11.3	
8	Arkansas	11.5	
9	Mississippi	12.7	
10	Florida	12.9	

Source: Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet Market Identifier File.

several years of longitudinal enterprise files in place, assessment of these trends will be made.

Small Firm Performance

An evaluation of the performance of the small business sector must include not only measures of physical output, but also the several ways smaller firms use capital and other assets somewhat differently than larger firms. The relationship between industry concentration and small firm performance is complex, and judgments are made even more difficult by the varying accounting systems used in each industry. In general, the *Quarterly Financial Report* of the Federal Trade Commission is the only source that provides data on profits by firm size.

Most discussions about the health of the United States economy raise the issue of productivity. For certain commodities such as pig

iron or refinery output, a measure of the physical product per hour of work is available, but for most businesses, particularly those in the service industries, no simple physical measure is available. For many such industries a measure derived from value-added may be used. This automatically attributes a higher value-added to high-wage or high-profit industries, such as manufacturing. Most small businesses are less productive than larger businesses when something other than a physical measure of output per unit of input is used.

Since wages are usually the largest single component of value-added, the wages paid per employee by firm size is an indicator of relative value-added per employee. This is illustrated in Table A1.5 in Appendix A. This table shows that the wages paid by small companies in the mining and wholesale trade industries are not much less than those paid by the largest companies. Of particular interest is the fact that the industry sectors with the greatest differences in wages between large and small firms, construction and retail trade, are two of the industries with the largest percentage of small businesses. Of additional interest is that the lowest average wage in the smaller size classes and the lowest average wage overall are found in two of the three industries with the largest percentage of small businesses: retail trade and selected services. These comparisons, however, have not been corrected for the greater part-time nature of the work in small firms. Such corrections, if available by firm size, might tend to significantly shrink the wage differentials.

Many measures of productivity do not capture the areas where small business contributes most importantly to national output. In particular, new entrants to the labor force have been numerous over the past decade. These entrants include both more women and younger workers from the postwar "baby boom." Such workers usually start with smaller firms, and as new entrants, command a lower wage. While the output of these workers increases national output, the value-added for each of these workers is less than the average of the more experienced worker. During such periods of structural change in the work force, "*productivity*" as measured in output per worker or value-added per worker is temporarily less than it would have been without the entry of such new workers. But national output has been increased. The currently used definitions of "*productivity*" minimize this important contribution of small business. If increase in real GNP per capita were used, a continued upward trend in United States productivity would be apparent.

Contributions by Small Business

In addition to job creation, small business plays another important role in national productivity. As shown by the high turnover in firms, small businesses are constantly testing untried and uncertain products, markets, and locations that have not been developed to a size large enough to attract larger businesses. Small businesses frequently locate in areas too remote for large firms and frequently occupy factories and buildings that might otherwise go unused. New jobs are created, new products and services are introduced, and otherwise unused resources are employed by the small business sector of the economy. Because of their size, small establishments or small firms can use resources that could not be used efficiently by large firms, and thereby contribute to resource conservation.

One of the most important contributions made by small business to the economy is producing innovations. Current research that extends the work on innovation conducted for the National Science Foundation in 1976 suggests that small firms are two to three times as innovative per employee as large firms.¹⁸ To arrive at this figure, researchers identified seven industries with disparate market structures. Trade journals in those industries were then searched for innovations for the decade of the 1970's and 635 innovations were found. Further study is planned to document the total value of innovations to the economy and compare the contributions by large and small firms.

Investment in Productive Plant and Equipment

An important contributor to high output per worker is investment in productive plant and equipment. Good data on assets per worker are available for manufacturing in the *Annual Survey of Manufacturers*. Data are collected by four size classifications and are shown in Table A1.6.

Four of the highest industries in fixed assets (plant and equipment) per production worker (petroleum, primary metals, paper, and chemicals) also include the three highest industries in wages

¹⁸"The Relationship Between Industrial Concentration, Technological Innovation and Firm Size," Gellman Research Associates, Inc., Jenkintown, Pennsylvania, SBA contract number SBA-2652-OA-79, 1982 forthcoming.

and in value added per production worker. (See Table 1.11.) These are all industries with very large companies and large establishments. Industries with the smallest fixed assets per production worker, (leather, apparel, and furniture) are among the four lowest in wages and in value added per production worker. Again, in contrast to the industries dominated by large firms noted above, the latter are among the industries dominated by small firms. Wages and value added per production worker are shown in Tables A1.7 and A1.8.

It is important to note that while small firms have fewer assets per worker than their larger firm counterparts, their sales per dollar of assets are higher in six out of eight major industry groups (excluding agriculture). (See Table A1.9.) This is because small companies must generally produce their revenues from fewer dollars of assets; that is, they have fewer assets "to go around" per employee. Therefore, sales per dollar of assets reflect the more effective utilization of small business assets.

TABLE 1.11—Average Company Size in Employment and Amount of Fixed Assets, Wages, and Value Added Per Production Worker for Selected Industries, 1976

[Employment, Number; Assets, Wages, Value Added in Thousands of Dollars]

Industry	Employment Per Company	Amount Per Production Worker		
		Fixed Assets	Annual Wages	Value Added
Petroleum	453	\$283.8	\$15.75	\$131.4
Primary Metals	261	\$ 63.1	\$14.44	\$ 39.1
Paper	199	\$ 63.5	\$12.72	\$ 46.0
Chemicals	160	\$108.1	\$12.53	\$ 98.8
Leather	151	\$ 4.6	\$ 6.38	\$ 16.5
Apparel	50	\$ 3.2	\$ 5.82	\$ 15.2
Furniture	26	\$ 9.4	\$ 7.64	\$ 20.9

Source: Department of Commerce, Bureau of the Census, *Annual Survey of Manufacturers*, 1976 and unpublished data prepared for the Small Business Administration.

SECTION V. SUMMARY

The difficulties encountered in counting and/or defining *the* small business sector are due to the myriad data sources and multi-dimensional concepts that could be used to define business size categories. Detailed statistical information is collected on less than one-half of all businesses that file income tax returns with the IRS.

About 99 percent of all businesses are small; however, roughly 10,000 of the largest companies provide about one-half the jobs

and more than one-half of the Nation's output. In general, these 10,000 companies are dispersed all across the country, and are found particularly in the mining, transportation, finance, and manufacturing sectors. Businesses in less concentrated sectors of the economy are more likely to be one-establishment firms and tend to be in the agriculture, construction, trade, and service sectors. The latter are the industries traditionally dominated by small firms.

Several factors combine to make definitive statements on industry concentration very difficult. First, the total number of businesses differs whether one uses IRS, Census, or the Small Business Data Base. While the Census Enterprise Statistics contain information on 5.6 million firms, some portion of the other 9.1 million businesses that pay income taxes are significant for policy purposes. It becomes somewhat arbitrary whether the lower limit to define a business is based on sales data from the IRS or employment data from the Bureau of the Census. These two sources, along with the individual company data used by the Small Business Administration in its data base, all contain certain differences making precise comparative statements difficult.

One of the major uses of the Small Business Data Base has been to study the distinction between small establishments that are owned by small firms, and small establishments that are owned by larger enterprises. The distinction is a crucial one for policy analysis because most Government programs appraise their success by establishment surveys when enterprise surveys would be more precise, albeit more difficult and costly.

Sales per employee are generally larger in big firms than in small companies. The sales shares in those industries traditionally dominated by small firms are generally smaller than their respective employment shares. The service sector, however, is an exception. In industries such as legal, medical, leisure, and business services, smaller firms appear to be achieving a disproportionate share of the market. This may be due to the fact that a small scale of output can still achieve economic efficiency. In other words, scale economies are not as applicable in the service sector as in the manufacturing sector. The states with the smallest number of employees per company appear to be emphasizing the nonconcentrated service industries that show rapid rates of growth.

While small firms are found to utilize assets more intensively than their large firm counterparts, small businesses appear less productive when a value-added measure of productivity per work-

er is used, principally due to the lower assets per employee. This generally results in wage differentials between small and large firms.

CHAPTER II

Current and Historical Trends in the Small Business Sector

This chapter presents the most current information available about changes in small business. As outlined below, the subject matter deals with themes such as growth and decline, profit and loss, and changes in the relative share of output attributable to small business. The discussions reflect changes in dynamic phenomena over time. In several cases, the data needed to reach precise conclusions are incomplete or available for too short a time period. In other cases, the necessary information may be unpublished or even unavailable. Nonetheless, the issues addressed in the following six sections are important in understanding how the small business community responds to changing economic conditions.

Section I examines recent growth in the small business sector from 1977-79 using classification by employment on an industry basis. Alternative measures of the changing size of the small business sector are examined, using trend data from recent tax returns. Recent trends regarding the self-employed are also observed.

Section II is a discussion of the changing numbers of small businesses, including the dynamics of growth, business formation, business failure, and the process by which firms alternately grow and prosper and contract and decline.

Section III is concerned with the experience of the small business sector during the 1974-76 recession. Of particular interest in this section are subsections on changes in Gross National Product (GNP), profit, and employment shares during the 1974-76 recession.

Section IV examines longer term trends in employment and sales in the small business sector from 1955-77, with particular emphasis on the declining share of the small business GNP. In particular, observations are made on

both an aggregate and micro-basis on the shift of sales away from very small firms to larger firms.

Section V examines recent employment trends by industry and size class in the small business sector at the state level from 1977-79 from several data sources.

Section VI is a chapter summary.

Non-Comparability of Data Sources

It is difficult to measure small business trends when a meaningful count of the number of small businesses cannot be attained. Economic and business statistics from Federal agencies are generally not well designed for the analysis of small business trends and policy issues. Further, many agencies do not prepare tabulations by size of business. Based on an agreement negotiated in FY 1980, the major Federal statistical agencies have agreed to publish new data using a specified set of size breaks beginning in FY 1983. Size breaks have been prepared using employment, sales, and assets as definitional criteria. Until 1983, however, data available by size frequently cannot be readily compared or integrated across agency sources.

Currently, consistent size class data are often not used for comparable reporting units. The Internal Revenue Service (IRS) and the Bureau of the Census (Census) differ in their definitions of establishments. Moreover, Census size class statistics on establishments usually do not distinguish between establishments that are independent business entities and establishments that are part of larger multi-unit companies.

Non-comparability of data is found also by geographic and industrial classifications. Basically, the IRS, Census, the Social Security Administration (SSA), and the State Employment Security (SES) agencies all classify their administrative, tax, and survey records by geographic location and Standard Industrial Classification (SIC) codes independently of each other. Consequently, a firm might be classified in one geographic area in a specific industry by one statistical agency and reported in a different geographic area or industry by another agency.

For these reasons, the following discussions shift between establishments, enterprises, and taxing units; between size classes; and between employment, assets, and receipts as the classification variables.

Employment data is used to examine the most recent changes in

the size of the small business sector because they are the most readily available and invariant to inflation. Receipts or sales data are less useful because they are several years old when published. Further, they are collected annually by IRS only by taxpaying units, which are not necessarily enterprises or establishments. To study recent employment growth by size class, it is necessary to examine establishment as opposed to enterprise data. The Census Bureau conducts surveys annually for establishments but only every five years for enterprises.

SECTION I. RECENT DEVELOPMENTS IN EMPLOYMENT BY SMALL BUSINESS BY MAJOR INDUSTRY AND SIZE CLASS: 1977-79

The period 1977-79 was generally a period of recovery and expansion for the economy following the 1974-75 recession. The GNP increased 5 percent annually during this period, after adjustment for inflation, compared to -0.8 percent annually during 1974-75, and 2.9 percent annually during 1970-80. In the discussions below, the period 1977-79 is examined for changes because it is the most recent two-year period for which complete data are available by business size.

Current trends in the distribution of businesses can be measured using employment, sales, or assets as classification variables. Employment data, however, are collected and published annually for all business establishments with employees in the United States by the Bureau of Labor Statistics (BLS) and the Bureau of the Census. Sales and asset information collected by IRS is more limited because taxpaying units are not necessarily complete business entities, and because sales information is not as reliable nor as current as employment data.

The discussions in this section are based on establishment data. This is less satisfactory than the use of enterprise data, but current information on employment changes by size class is not available on an enterprise basis.

Using Unemployment Insurance (UI) data from the Department of Labor, employment changes between 1977 and 1979 are analyzed by size class of establishment in this Section. Employment changes by size class of establishment in those two-digit SIC industries which grew the fastest and the slowest nationally between 1977 and 1979 are also compared, and changes by establishment size in major industry divisions are examined.

The industries exhibiting the fastest and the slowest growth in

the 1-19 employee and 20-99 employee size classes are shown to differ only slightly from the fastest and the slowest growing industries in the economy as a whole. The absolute magnitudes of employment change are also shown for major industries between 1977 and 1979 in four establishment size classes: 0-19 employees, 20-99 employees, 100-499 employees, and more than 500 employees. (Table A2.1 shows the percentage changes in employment by four size categories relative to the national changes.)

The major finding from a review of the data is that the service industry is dominant in generating jobs. From 1977 to 1979 total employment grew by 7.12 million jobs, or 11.8 percent. The largest employment increases occurred in the service sector which grew by 2.11 million jobs and accounted for 29.7 percent of the total increase. Small establishments under 100 employees grew disproportionately, accounting for 54.5 percent of the increase in services. This is about 5 percent above their overall contribution of 48.6 percent to employment growth. (See Table 2.1.)

Table 2.2 shows that five of the 10 fastest growing industries nationally were also in services. These included social services and educational services, the fastest growing industries during the 1977-79 period, plus business services, repair services, and miscellaneous repair services. The remaining fastest growing industries nationally included two extractive industries (oil and gas produc-

TABLE 2.1—*Job Growth in Establishments by Employment Size of Establishment, 1977-79*

[Thousands of Jobs]

Industry/ Division	Employment Size Class				Total
	Under 20	20-99	100-499	500+	
All Industries	1355.4	2103.0	1919.5	1742.0	7119.8
Agriculture, Forestry, Fisheries	90.4	149.7	88.8	15.7	344.6
Mining	9.7	29.4	22.2	20.6	81.9
Construction	211.0	257.6	151.3	25.5	645.4
Manufacturing	34.1	223.3	40.0	869.6	1624.3
Transportation, Communications, Utilities	42.0	95.3	70.0	-0.2	207.4
Wholesale Trade	119.2	211.6	143.0	40.5	514.3
Retail Trade	178.6	480.6	326.4	213.3	1198.9
Finance, Insurance, Real Estate	78.9	96.1	108.7	108.9	392.6
Services	591.6	559.1	511.0	449.5	2111.2

Note: Detail may not add to totals due to rounding. Totals exclude government.

Source: Data derived from U.S. Department of Labor, Bureau of Labor Statistics, Unemployment Insurance (UI) System, unpublished data, January 1981.

tion, and fisheries); two construction industries (general construction and special trade construction); and transportation services.

The only differences between the fastest growing industries nationally and those in small establishments were in the inclusion of auto repair services in the 0-19 group (ranked 11th nationally), the inclusion of legal services in the 20-99 group (ranked 14th nationally) and the inclusion of pipeline transportation in the 20-99 group (ranked 46th nationally).

Excepting the service sector, manufacturing had the next highest

TABLE 2.2—Ten Fastest and Slowest Employment Growth Areas for Small and Total Establishments by Major Industry Groups, 1977-79

Rank	Small Establishment Size Class ¹		
	Under 20 Employees	Fastest Growing (Descending Order) 20-99 Employees	Total Establishments
1	Educational Services	Educational Services	Educational Services
2	Social Services	Social Services	Social Services
3	Fisheries	Auto Repair Services	Misc. Services
4	Transportation Services	Special Trade Construction	Oil and Gas Extraction
5	Business Services	General Construction	Business Services
6	Misc. Services	Business Services	Fisheries
7	Auto Repair Services	Misc. Repair Services	Transportation Services
8	Oil and Gas Extraction	Legal Services	Special Trade Construction
9	Misc. Repair Services	Transportation Services	General Construction
10	General Construction	Pipeline Transportation	Misc. Repair Services
Slowest Growing (Descending Order) ²			
1	Combined (Real Estate & Insurance) Offices	Combined (Real Estate & Insurance) Offices	Combined (Real Estate & Insurance) Offices
2	Petroleum Refining	Tobacco Manufacturing	Air Transportation
3	Food Processing	Text. Mill and Apparel	Metal Mining
4	Tobacco Production	Food Processing	Petroleum Refining
5	General Merch. Stores	Leather Products	Anthracite Mining
6	Primary Metal Industries	Commodity Brokers	Water Transportation
7	Motion Pictures	Anthracite Mining	Pipeline Transportation
8	Banking	Petroleum Refining	Leather Products
9	Leather Products	General Merch. Stores	Apparel & Fabricated Textiles
10	Metal Mining	Paper & Related Products	Misc. Manufacturing

¹Small establishments are defined as those with less than 100 employees.

²Descending order means that the fastest (slowest) growing industry is ranked first.

Source: Department of Labor, Bureau of Labor Statistics, Unemployment Insurance (UI) System Data, unpublished size detail, January 1981.

growth in employment with an increase of 1.62 million jobs or 22.8 percent of the total increase. Retail trade ranked third with 1.20 million new jobs, representing a 16.9 percent share of the total. (The absolute growth by size class of establishment is summarized in Table 2.1.) In those industries, and in construction and wholesale trade as well, the small establishment share dominated the overall increases.

In the aggregate, then, the overall contribution of small establishments (under 100 employees) to national job growth during the 1977-1979 period was significant. Establishments under 100 employees accounted for 48.6 percent of net employment increase during 1977-79, which is roughly consistent with their 50.7 percent share of total nongovernment employment in 1979. Establishments under 500 employees contributed 75.5 percent of the total increase in jobs during 1977-79, approximately the same as their share of total employment as well.

What is more important, however, is that this employment generation has been maintained while the share of GNP contributed by firms of under 500 employees has been declining. As discussed below and in Chapter I, the vigor of the small business sector has remained despite recent increases in business failures and declines in sales per employee.

Table 2.2 shows variation in the types of industries comprised of small establishments which were the slowest growing between 1977 and 1979 and those which were the slowest growing generally. For example, various categories of the transportation sector, (air, water and pipeline transportation) were among the slowest growing industries nationally, but because these industries are dominated by large firms, they do not appear in the list of the slowest growing industries grouped by small establishment size.¹ Conversely, some industries in which employment in small establishments is declining, such as the primary metal industries, are those which show moderate growth generally.²

SECTION II. RECENT EVIDENCE ON THE CHANGING NUMBERS OF SMALL BUSINESSES

If complete and accurate information were available, business startups (formation), and subsequent expansions, contractions,

¹ In fact, the reverse was true for pipeline transportation services.

² Of 70 two-digit SIC code industries, primary metals was ranked 38th nationally between 1977 and 1979.

deaths, and other dissolutions could be traced. However, because of the incomplete nature of the data in each of these areas, the targeting of specific economic policies toward businesses of varying sizes and industries becomes much more difficult. For example, precise information concerning the formation and dissolution of construction companies by size class is needed to understand the effects of high interest rates by business size, and to determine whether tax relief might be necessary.

This general lack of information on business failures and startups led the Office of Advocacy of the United States Small Business Administration (SBA) to begin work on the Small Business Data Base. Because of the need to target policies more precisely and to understand their effects on different subsectors of small business, information at the individual company level is needed. While such information is collected by a number of Federal and State agencies, it is not available to SBA under current laws. Therefore, SBA purchased the files of a private corporation, Dun and Bradstreet, Inc., which contains information at the firm level on business formations and dissolutions. Within a year, the SBA Small Business Data Base will contain sufficient information to trace a business through its various life cycle stages. The data base includes information on 4.7 million establishments for the years 1978 and 1980, with the potential to include 1976 data.

Business Formation

In the current statistical system a business can manifest itself as viable in several major ways. A firm may file a tax return as a proprietorship, partnership, or corporation with the IRS; may respond to a Government survey; or may apply for credit. Each of these activities provides a signal on business formation which differs somewhat both in the aggregate and by major industry.

As noted in Table 2.3, IRS data show that the number of tax returns filed is increasing about 2.1 percent annually for proprietorships (which are sometimes self-employed persons³), about 3.2 percent for partnerships, and 4.2 percent for corporations. As shown in the table, proprietorship returns represent the largest portion of

³The Bureau of the Census "class of worker" concept and the Internal Revenue Service "taxpaying unit" concept are not comparable. The class of worker concept is used for distinguishing types of workers, including self-employed persons; the taxpaying unit concept is used for business rather than individuals. In the case of sole proprietorships with no employees and self-employed persons, the definitions coincide.

the small business sector, numbering over 12 million in 1978, compared to 1.2 million partnership returns, and 2.4 million corporation returns. Because of the myriad ways in which a corporation can file its income taxes (as an entire corporation, or by separate branches and subsidiaries), it is not possible to produce a weighted average of the three types of tax returns shown in Table 2.3 to produce a net index of business formation. From the available data, however, it appears that average business formation is between 2.1 percent and 4.2 percent annually.

Data on new business incorporations are compiled by Dun and Bradstreet based upon the corporate chartering in each state. According to Dun and Bradstreet, new incorporations fluctuate much more widely than the tax filings of corporations. In addition, the relationship between tax returns filed by corporations and new business incorporations is imprecise. For example, while the number of corporate tax returns filed increased by about 135,000 from 1977 to 1978 (2.242 million to 2.377 million), the number of new business incorporations was about 450,000 per year. (See Table 2.4 and A2.2.) The most likely explanation for the 300,000 difference is a combination of business dissolutions and changes in taxpaying status.

Another basic measure of business formation is the self-enumeration household-type survey, which is designed to obtain information on the self-employed. One such survey, the annual *March Current Population Survey* of the Bureau of the Census, reports that the number of declared self-employed persons has risen

TABLE 2.3—*Sole Proprietorships, Partnerships, and Corporations, 1974-78*

[Numbers in Thousands]

Year	Sole Proprietorships ¹	Partnerships ¹	Corporations ²
1974	10,874	1,062	1,966
1975	10,882	1,073	2,023
1976	11,358	1,096	2,082
1977	11,345	1,153	2,242
1978	12,018	1,234	2,377
Annual Percentage Increase, 1974-78	2.1	3.2	4.2

¹ Department of the Treasury, Internal Revenue Service, *Statistics of Income Bulletin*, Vol., No. 1, Summer 1981.

² Department of the Treasury, Internal Revenue Service, *Corporation Income Tax Returns*; 1977 and earlier years.

TABLE 2.4—*New Business Incorporations*
[Number and Percent]

Year	Number	Year-to-Year Change (Percent)
1981	1 576,758	7.9
1980	533,520	1.7
1979	524,565	9.7
1978	478,019	9.6
1977	436,172	16.1
1976	375,766	15.1
1975	326,345	2.3
1974	319,149	- 3.1
1973	329,358	4.0
1972	316,601	10.1
1971	287,577	8.8
1970	264,209	- 3.7
1969	274,267	

¹ Total annualized on basis of data for half year.

Source: Dun and Bradstreet, "Monthly New Incorporations."

from 7.3 million in 1974 to 8.2 million in 1979. This demonstrates a 2.4 percent annual rate of increase.⁴ The data reported in this survey and the proprietorship returns from the IRS should be close, although no study has examined the relationship. It appears that this group of self-employed persons has entered the contractual services industry in such job areas as cleaning and janitorial services for buildings, self-employed skilled workers in construction, and child-care workers.⁵

In addition to the household enumeration of wage and salary workers, two additional industrial surveys tabulate annual increases in the number of business establishments reported by the survey respondents. One survey is conducted by the Bureau of the Census and published in *County Business Patterns*, and the other is conducted by BLS and published in *Employment and Earnings*. As described in more detail below, between 1975 and 1977, the annual increase in the number of establishments was 2.9 percent. Between

⁴ United States Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*. (Washington: Government Printing Office, November 1980), p.4.

⁵ Many of these occupations have been filled increasingly by females on a part-time, part-year basis. In addition, the income from such jobs has been below that for comparable wage and salary workers. Such information comes from the Social Security Administration's Continuous Work History Sample file (CWHs) for 1960-75.

1977 and 1979, however, according to the latest available data by size, the annual increase in the number of establishments reported slowed to 2.1 percent.

In general, although these surveys represent only those employers who have employees, they may also include a fraction of the so-called "zero employee" firms; these are businesses consisting of self-employed persons who have a helper during some part of the year, but not during the week the survey is taken. The majority of the parent organizations of the establishments surveyed are corporations.⁶

A third major source of information on net business formation, and the major part of the Small Business Data Base, is an index issued by the Department of Commerce in its *Business Conditions Digest*, based primarily upon the Dun and Bradstreet data on new business incorporations.⁷ During the past several years, the index has declined from 126.5 in 1977 to 121.1 in 1980. (The base is 1967.) Preliminary data estimate a value of 117.0 in 1981. This index, which omits many small retail and service firms that do not seek credit, is at its lowest level since 1974-75, but still above the level of the 1969-70 recession. (See Table 2.5 below.)

TABLE 2.5—Index of Net Business Formation

Year	Index
1981	117.0 (Estimated)
1980	121.1
1979	131.7
1978	132.9
1977	126.5
1976	117.2
1975	108.9
1974	111.2
1973	115.5
1972	115.5
1971	109.5
1970	107.1
1969	113.5

Source: Department of Commerce, Bureau of Economic Analysis, *Business Conditions Digest*, various issues.

⁶ This is a very difficult group of establishments to chart because they consist of both self-employed persons and wage and salary workers. Steps are currently underway to increase understanding of this diverse group.

⁷ In contrast to the data in Table 2.4, Dun and Bradstreet data include new proprietorships and partnerships as well.

On a monthly basis, the index tends to lead the turning points of the peaks and troughs of the business cycle. During 1980 the index dropped monthly from a high of 131.0 of its base in January to 114.8 in June. It increased irregularly to a new high of 121.3 for December and again turned downward prior to the peak of the cycle in early 1981.

Understanding the relationships among the three major sources of information on business formation clearly highlights a major problem with the Federal statistical system.⁸ (See Table 2.6.) Essentially, it is impossible to make a definitive statement on business formation because the relationships between the legal form of a tax-paying unit and a corporation or non-corporate entity is unknown. The major Government establishment and enterprise surveys essentially cover all corporations and a fraction of the larger proprietorships and partnerships.⁹ As shown in Table 2.6, the rate of formation is quite variable depending upon the source used.

Chapter I presented the many different ways in which small business may be defined. One definition frequently used indicates that approximately 40 percent of the proprietorships and partnerships formed report less than \$10,000 a year in gross receipts. It appears, therefore, that a number of the proprietorships and partnerships represent part-time or part-year businesses.

Very little is known about the many part-time, part-year businesses. Most of the statistical data in this country are collected on the other 5 million businesses, as discussed in Chapter I. Although these businesses are quantitatively smaller in number, they comprise most of the full-time and almost full-time business activity. The following section examines some recent trends from *County Business Patterns* by size class of establishment on these five million establishments.

Changes In the Number of Establishments by Size Class: 1975-79

The general comments made above concerning the rate of change of the GNP from 1977-79 are almost equally applicable for

⁸ There is no annual survey to determine the total number of new companies. However, the Small Business Data Base will provide this information on a pilot basis based on Dun and Bradstreet data. The Census Bureau updates the *Company Organization Survey* annually, but the smallest companies with under 50 employees are only contacted on a rotating basis every three years.

⁹ United States Department of Commerce, Bureau of the Census, *Enterprise Statistics*, Table 7. Table 7 depicts the legal form of organization of enterprises covered in the survey.

TABLE 2.6—Annual Average Increase in Businesses by Data Series for Selected Years

[Percent of Increase]

Years	Data Series	Type of Business				
		Reporting Unit	Total	Sole Proprietorship	Partnership	Corporation
1970-74	Internal Revenue Service—Statistics of Income	Tax Returns	—	2.1	3.2	4.2
1974-79	Census—Current Population Survey	Persons	—	2.4	—	—
1975-78	Dun and Bradstreet—New Incorporations	Charters	—	—	—	15.5 ¹
1975-77	Census—County Business Patterns	Establishments	4.2	—	—	—
1977-79	Census—County Business Patterns	Establishments	5.8	—	—	—

¹ Data are recorded for all new incorporations; therefore those that fail during the year are included in the annual totals although they may never file a tax return or participate in a government survey.

Sources: Department of the Treasury, Internal Revenue Service, *Statistics of Income*; Department of Commerce, Bureau of the Census, *County Business Patterns* and *Current Population Survey* (various issues and releases).

the 1975-77 period, with the exception that the inflation-adjusted rate of GNP increase was about 1 percent higher in 1975-77 (5.4 percent) compared to 1977-79 (4.0 percent). After the bottoming of the cycle in early 1975, the economy recovered strongly during this period, with an increase in employment of 2.4 million jobs annually, or about 11 percent during the four-year period. While the number of establishments rose about 2.5 percent annually during this period, significant differences may be observed when the size of the establishments is considered.

The data problems previously outlined in Chapter I prevent direct discussion of the most current number of small firms as opposed to the number of small establishments. Available data does not allow identification of the ownership status of establishments. Thus, until July of 1982, when this information will be available from the Small Business Data Base, only aggregate trends can be examined. While the number of establishments with employees rose by 4.2 percent from 1977-79 for all size classes, it declined 1.4 percent for establishments with less than four employees. The number of such establishments dropped by 36,000 between the two years. (See Table 2.7.) These are net changes and can represent either births, deaths, expansions, or contractions of businesses. If the scale of investment or output needed to enter and sustain a viable business is rising, this could account for some of the observed changes. However, businesses in the 1-4 employment size category did increase 3.8 percent between 1975 and 1977.

TABLE 2.7—Establishments by Industry Divisions and Employment Size Classes, 1975, 1977 and 1979

[Numbers]

Industry	Year	Employment Size Class							500 or more
		Total	1-4	5-9	10-19	20-49	50-99	100-499	
All Industries	1975	4114262	2427651	749305	459793	299428	98276	68684	11125
	1977	4352295	2521004	814310	497296	324163	108687	75229	11606
	1979	4535653	2484864	895744	568501	375656	129255	91581	13172
Agriculture, Forestry, Fisheries	1975	39979	29767	6317	2644	961	183	98	9
	1977	44997	32661	7419	3264	1209	258	177	9
	1979	45880	31391	8489	4021	1471	316	178	14
Mining	1975	24407	10739	3951	3810	3284	1227	1212	184
	1977	27755	12403	4485	4244	3645	1391	1360	227
	1979	27878	11322	4524	4381	4135	1644	1598	274
Construction	1975	363725	239154	60379	34896	20329	5637	3056	274
	1977	439381	296600	72330	40027	21594	5762	2786	282
	1979	447273	272498	83569	50012	28761	7977	4105	351
Manufacturing	1975	305937	96110	50682	49477	50367	25438	28194	5669
	1977	327850	105101	53844	52542	52984	26843	30437	6099
	1979	320605	88009	51497	54148	57225	29491	33551	6684
Transportation, Communications, Utilities	1975	146669	72742	25712	20400	15606	6140	5117	952
	1977	166465	82743	28916	22698	18076	7394	5774	864
	1979	168062	76159	30534	25001	20495	8347	6493	1033
Wholesale Trade	1975	349812	159706	80822	60807	36208	8888	3858	243
	1977	375077	173050	86652	63526	38380	9081	4080	218
	1979	382872	162052	90822	69703	43997	11411	4892	265
Retail Trade	1975	1189563	656520	258368	148788	91849	23934	9878	726
	1977	1254377	684625	277576	161337	100713	27950	10492	684
	1979	1236587	597815	293017	180761	115989	35205	13102	698

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TABLE 2.7—Establishments by Industry Divisions and Employment Size Classes, 1975, 1977 and 1979 (Cont'd.)

Industry	Employment Size Class								
	Year	Total	1-4	5-9	10-19	20-49	50-99	100-499	500 or more
Finance, Insurance, Real Estate	1975	372245	243712	59580	35708	23031	6454	4074	686
	1977	413128	268430	66156	39294	26342	7674	4545	685
	1979	424805	262241	73905	44029	29488	9130	5279	733
Services	1975	1117806	738026	189380	97923	55901	20297	13697	2382
	1977	1233652	807690	214979	109615	60948	22294	15588	2538
	1979	1261955	766630	243892	130375	72675	26000	19263	3120
% Change for All Industries	1977-79	4.2	-1.4 ¹	10.0	14.3	15.9	18.9	21.7	13.5
	1975-77	5.8	3.8 ¹	8.7	8.2	8.3	10.6	9.5	4.3

¹ If unclassifiable industries are removed from the total, for the 1-4 employment class, the change in the 1-4 class is 9.6% (compared to 3.8%) for 1975-77 and -7.9% (compared to -1.4%) for 1977-79.

Sources: Department of Commerce, Bureau of the Census, *County Business Patterns*, U.S. Summary volumes, CBP-75-1, CBP - 77-1, CBP - 79-1, tables 1B.

A reduction in the 1-4 employee establishments occurred in every major industry. (See Table 2.7.) These smallest sized entities declined 13 percent in retail trade from 1977-79, 16 percent in manufacturing, 8 percent in construction, and 5 percent in services during this period. While some of the decline is probably due to the continuing effect of increasing scale economies, much of it is, inevitably, a result of business failures.

When comparisons are made between 1975-77 and 1977-79, the evidence is strong that the 1-4 employee firms are declining. Between 1975 and 1977, the number of establishments with 1-4 employees rose in every industry, and increased nationally from 2.4 million to 2.5 million establishments. (See Table 2.7.) Yet the reversal of the number of businesses in this size group from 1977 to 1979 is particularly striking. In retail trade, for example, the number of establishments with 1-4 employees rose 4.3 percent between 1975 and 1977 and declined by 12.7 percent from 1977 to 1979.

While the number of very small establishments is shrinking, the number of large establishments is growing. From 1975 to 1977, the number of establishments with more than 500 employees rose slightly from 11,125 to 11,606. Between 1977 and 1979, however, the number rose from 11,606 to 13,172, an increase of 13.4 percent. This increase, while numerically small, represents an employment increase of about 2.5 million more persons in large establishments.

Business Failure, Contraction, and Decline: Number of Failing and Dissolving Businesses

A discussion of business formation is invariably linked with a statement on business dissolution. A business may dissolve for a variety of reasons including merger, retirement of the owner, failure with no loss to a creditor, or failure with a loss to a creditor (which is a bankruptcy). The vast majority of dissolutions in this country are failures with no reportable loss to a creditor. These are not normally tabulated by a credit-reporting company such as Dun and Bradstreet nor by any Federal agency.

The Dun and Bradstreet Company does publish annual statistics on business failures. These appear to be a combination of court recorded bankruptcy petitions,¹⁰ plus information on business disso-

¹⁰ Based on Dun and Bradstreet data, over 95 percent of the business failures each year have had liabilities of less than \$1 million. There is, however, no known statistical relationship between business size and liability size of the failing businesses.

lution reported from the field reporters of Dun and Bradstreet. In October 1981, for example, Dun and Bradstreet reported 1,312 business failures. This would yield an annual figure of 15,744 failures if the October figure were representative of each month. In any event, it would account for only 6.7 percent of the 235,000 firms which leave the Dun and Bradstreet file each year.¹¹

The Federal Administrative Office of the U.S. Courts, Bankruptcy Division, also maintains statistics on the number of court-recorded bankruptcies. In September 1981, there were 3,857 such filings, and the total for the 12-month period ending September 1981 was 46,486. This would represent 19.8 percent of the dissolutions observed by Dr. David Birch of the Massachusetts Institute of Technology (MIT), and three times the Dun and Bradstreet figure for failures with a loss to creditors.

There is little agreement on how to divide the number of business dissolutions into component parts. Even if 20 percent is accepted as an upper limit of the percentage of business dissolutions which are bankruptcies, 80 percent must be accounted for by voluntary retirements and dissolution without loss to creditors. The remainder of this section examines the limited available evidence on business dissolution by age of the business and major industry.

Business Dissolution by Size and Age of the Business

The probability of surviving is related to both the size and age of the business. Table 2.8, which is based upon Dun and Bradstreet data from 1969 to 1976,¹² indicates that new establishments with under 20 employees have only a 37 percent chance of surviving four years in business and a 9 percent chance of surviving 10 years. If a business has 21-50 employees, chances of surviving four years are 43 percent higher. Survival probabilities therefore rise markedly after a firm passes the 20 employee mark.

The age of a firm appears to have a lesser role in determining survival probability compared to the size variable. For example, across all size classes of establishments, data indicate that 63.9 percent of the dissolving firms were less than four years old, 55.6 percent were five to nine years old, and 51.5 percent were more than 10 years old.¹³ Therefore, the survival probability by age differs by

¹¹ David L. Birch, *The Job Generation Process*, a report prepared by the Massachusetts Institute of Technology Program on Neighborhood and Regional Change (Cambridge, Mass., 1979). This 235,000 figure is based on a turnover rate of 5 percent of the businesses in the Dun and Bradstreet File.

¹² *Ibid.*

¹³ Birch, *op. cit.*, Table 4-4.

TABLE 2.8—*Survival Probabilities and Indices, 1969–76*

(0–20 = 1.00)

Initial Employment Size	Surviving Past 4 Years		Surviving Past 9 Years		Surviving Past 10 Years	
	Survival Probability	Index	Survival Probability	Index	Survival Probability	Index
0–20	37.4%	1.00	17.3%	1.00	8.6%	1.00
21–50	53.6	1.44	35.2	2.03	26.2	3.05
51–100	55.7	1.49	36.4	2.10	27.4	3.10
101–500	56.4	1.51	36.8	2.13	28.3	3.29
501 or more	67.7	1.82	42.5	2.46	35.7	4.15

Note: Data represent dissolutions of firms in the Dun and Bradstreet files from 1969–76. A large part of the dissolutions was comprised of business failures.

Source: Harvey A. Garn and Larry C. Ledebur, "The Renaissance of Concern for Small Business Enterprise in the United States," Urban Institute Working Paper 1355–1, February 22, 1980.

less than 10 percentage points when a firm has been in existence less than four years, compared to one that has been in existence more than 10 years.

Business Dissolutions by Industry

The previous discussion was concerned with total business failures in the economy. While this is a useful general economic indicator, it tends to mask the strengths and weaknesses in the economy which can only be observed at an industry level. Two sources of information on business dissolution by industry are the Statistics Division of the IRS and Dun and Bradstreet's *Business Failure Record*. (See Table A2.3.) The table lists the number of partnerships by industry which filed "final" tax returns in 1978. "Final" means that the business was ceasing operations, effective with the filing of this last return.¹⁴

In 1978, 10.23 percent of the partnership returns of a total of 1.2 million filed were final. By major industry these returns were distributed as follows: services (25 percent), finance, insurance and real estate (28 percent), retail trade (20 percent), construction (11 percent). The remaining 16 percent were scattered across other major industries. Those industries in which partnerships were the

¹⁴For example, of the 1.2 million partnership returns filed in 1978, 126,825 indicated that this tax return would be the last one filed by the respective business. Similar tables for proprietorships will be included in next year's report.

most likely to dissolve, and their dissolution rates, are found in Table 2.9. For example, nearly one-third of the heavy-construction partnerships were about to cease operations in 1978 according to these data, and 20 percent of the furniture stores run by partnerships were also ready to close. Virtually every one of the industries listed is dominated by small firms.

The Dun and Bradstreet failure data by industry cannot be directly compared with the IRS data because Dun and Bradstreet does not fully cover the finance, service, or agriculture sectors in its failure statistics. For those industries which they do cover, however, the construction and retail trade sectors comprised two-fifths of the total recorded failures. Small firms comprise the majority of businesses in those two sectors.

TABLE 2.9—*Dissolution Rates of Partnerships in 1978*

Code	Title	Dissolutions in Descending Rank Order
16	Heavy Construction	31.4
57	Furniture Stores	19.0
76	Misc. Repair Services	17.6
17	Special Trade Contractors	17.6
54	Food Stores	17.1
15	General Construction	16.4
82-89	Misc. Services	15.9
56	Apparel Stores	15.4
42	Trucking and Warehousing	14.9
59	Misc. Retail Stores	14.4

Source: Department of the Treasury, Internal Revenue Service, unpublished data, 1982.

Business Failures: 1980-81

The number of business failures reported by Dun and Bradstreet is a valuable indicator of business distress. As shown in Table 2.10 and A2.4 the increase in reported failures between 1980 and 1981 for those major industries on which Dun and Bradstreet issues reports has ranged from 32 percent in wholesale trade to 49 percent in construction. While these data exclude key industries, such as finance and mining, the largest increase in failures is in industries with a majority of small firms.¹⁵

¹⁵ Some effort has been made to establish the degree of relationship between business failures and the level of the real prime rate. One study showed a correlation between the two variables of .745 from 1978 through 1980 and .755 for the five-year period 1976-1980. See in particular the National Small Business Association, "Report on Business Bankruptcies," September 12, 1981, page 4.

TABLE 2.10—*Increase in Business Failures by Industry Divisions,
First Three Quarters of 1980 to First Three Quarters of 1981*

[Percent]

Industry Division	Percent of Increase
Construction	48.9
Services	47.4
Retail Trade	41.3
Manufacturing	37.2
Wholesale Trade	31.8

Source: Dun and Bradstreet, *Monthly and Weekly Failures*, various issues.

Recent Trends in Bankruptcies: 1980-81

As discussed above, the trend in business bankruptcies is closely observed by the Office of Advocacy of the Small Business Administration as a signal of business distress. At present, however, the usefulness of bankruptcies as a small business distress signal is clouded by a recent extensive revision of the bankruptcy laws. The Bankruptcy Reform Act of 1978, which became substantially effective in October 1979, permits businesses to use new and simplified alternatives to liquidation or closing which may encourage many small firms to file.

Under previous bankruptcy law the procedure to reorganize and rearrange debts was complicated, lengthy and very costly for small companies. Chapter 11 of the Reform Act simplifies the proceedings and reduces delays for companies that want to reorganize and remain in business. The more efficient proceedings under Chapter 11 can provide small businesses with a means to survive until the effect of the recession abates and conditions for financing their businesses and sales and services improve. Chapter 13 of the Act also opens proceedings to sole proprietors that formerly were available only to wage earners. Now any individual with unsecured debts of \$100,000 or less, or secured debts of \$350,000 or less, and sufficient income to permit a repayment plan, may retain company assets and develop and implement a plan to stay in business under court supervision and protection. Because the majority of bankruptcies are voluntary, these new provisions of the Reform Act may modify the predominant trend of filing for straight bankruptcy under Chapter 7, which provides for liquidation of the company under court supervision.

Bankruptcy data must be developed for a longer period of time to separate and assess the impact of the change in the law on bankruptcy filings. But growth in bankruptcies has been affected to some degree by the economic activity of 1980 and 1981. The 35,214 filings in the first nine months of 1981 were 10 percent higher than the filings of 1980 for the period. When first-quarter data for each of the two years are compared, bankruptcies show a 32 percent increase.

As noted above, the business failures reported by Dun and Bradstreet increased 48 percent between 1980 and 1981. Clearly the bankruptcy and failure series are related, with perhaps the correct increase in the business dissolution percentage somewhat less than 32 percent as a lower boundary.¹⁶

Contraction of Large Firms Versus Failure of Small Firms

In general, large firms over 500 employees do not simply fail, they reduce operations and at some later stage cease to exist. Many smaller firms, already operating at marginal levels, simply fail if they enter a downturn.

Growth patterns of establishments studied separately between 1969-72, 1972-74, and 1974-76, using data from Dun and Bradstreet, suggest that the chances of failure for large firms are highest when the firm has undergone a recent large contraction.¹⁷ Large firms, however, have a "cushion" to fall back on while small firms do not.¹⁸ There appears to be little industry variation to this observed pattern. It is not surprising, therefore, that the available failure data show that "final" tax returns which are filed tend to be in industries dominated by small businesses.

¹⁶ If a shift toward more bankruptcy filings took place because of the more relaxed laws, the 32 percent overstates the number of bankruptcies that would have occurred under the old bankruptcy law. Therefore, the lower boundary would probably be below 32 percent.

¹⁷ David L. Birch, *Corporate Evolution—A Micro-Based Analysis*, a report prepared by the Massachusetts Institute of Technology Program on Neighborhood and Regional Change (Cambridge, Massachusetts, January 1981), p. 20. Funded by the Small Business Administration under grant no. 14151.

¹⁸ *Ibid.* Similar phenomena are observed by Nonna A. Noto and Dennis Zimmerman, "Federal Assistance to Troubled Firms: An Analysis of Business Failure Data." (Library of Congress, Congressional Research Service, December 1980, draft).

The little that is known in the complex area of the dynamics of firm growth comes from studies using two major data sources: the Dun and Bradstreet files from 1969-76, and the Social Security Administration's Continuous Work History Sample (CWHHS) data file. The kinds of questions asked in this area have been those concerned with the "life cycle" of firm growth, such as: (1) Do firms grow steadily or cyclically?; (2) What are the probabilities of expanding, contracting, or remaining in the same size class over time?; and (3) What part of overall economic growth is composed of expanding an existing business versus growth attributable to the births of new firms and the creation of new jobs?

Rather than growing along a steady path, firms "pulsate" around a longer-term secular trend. In fact, recent research shows that companies with the largest *gains* during 1969-72 had the highest odds of *declining* from 1972-74.¹⁹ The companies "tended to over-extend in one period and pay a price for it. Conversely, the companies with the largest *declines* between 1969 and 1972 had the greatest chances of experiencing a *big gain* in the next period . . . along with an above-average chance of dying."²⁰

It appears that firm growth corresponds roughly to an oscillation, rather than to any steady pattern. Such a finding implies there is a need to study firm growth by examining a sample of firms over a sufficiently long time period to adjust for the temporary, short-run cycles. Such a sample of firms is now being developed by the Brookings Institution, under contract to the Small Business Administration, as part of the Small Business Data Base Development Program of SBA's Office of Advocacy.

The Major Growth Components: Births, Deaths, Expansion and Contraction

The historical research on job generation can only be summarized here. Essentially, studies based upon the Dun and Bradstreet historical Market Identifier (DMI) files from 1969 to 1976 have shown that during this time period, 66 percent of new jobs were created by firms and establishments with under 20 employees, and 52 percent of the jobs came from autonomous small firms.²¹ By ge-

¹⁹ Birch, *Corporate Evolution - A Micro Based Analysis*, op. cit.

²⁰ *Ibid.*, p. 18.

²¹ Birch, *The Job Generation Process*, op. cit., p. 9.

ographic region, small businesses generated virtually all net new jobs in the Northeast, 54 percent in the South, 60 percent in the West, and about 50 percent in the Midwest. Significant differences by major industry divisions are noted when job creation is divided into its two major segments of births and expansions. Much of the earlier work in this area was only summarized at the all-industry level. Job creation is examined below by the major components of births less deaths and expansions less contractions, by industry.

For example, while very small manufacturing and retail trade establishments (1-4 employees) generated 26 percent of the new jobs from 1969-76 through births, the other three quarters came from expansion. In the services and agriculture industry sectors the opposite was true. Therefore, as a public policy matter, the emphasis on encouraging new business formation versus the preservation of existing firms has an industry-specific dimension which should be understood in public policy discussions of job creation. Of the smaller establishments where jobs were generated through expansion, about one-half of the establishments were under eight years old. In larger establishments, only 20 percent of job expansion occurred in establishments under eight years old.

By implication it appears that the scale of business operations is rising. Put differently, a larger business size is now needed to reduce (or spread) average costs sufficiently to remain in business. Included in these costs are costs of regulation, costs of information and processing, and costs of inertia.²²

SECTION III: SMALL BUSINESS PROSPECTS DURING A RECESSION

While the experiences of small firms during the peaks and troughs of a business cycle are of general interest, it is the bottom part of the cycle that generally gives rise to an increased demand for Government intervention. At the trough of the cycle, the profit position of a small firm is at its lowest, and business failures are usually at their highest.

²²On these points see William A. Brock and David S. Evans, "The Impact of Federal Regulations and Taxes on Business Formation, Dissolution, and Growth." Prepared under grant no. SB-1A-00006-01-0 with the Office of Advocacy, Small Business Administration, draft final report December, 1981. See also Alvin D. Star, "Concentration in Retail Trade and Services." Prepared under contract number SBA-2649-OA-79, Summer, 1981, Office of Advocacy, Small Business Administration.

Our knowledge of business cycle phenomena at this early stage of research is limited to the conclusions from only a very few studies. However, from these studies, a pattern emerges concerning the effect of a recession on the profit levels of firms, on the ability of firms to maintain their market (sales) shares, on the ability of firms to create jobs, and on the ability of firms to respond to changing economic conditions. While these and other statements on firm dynamics must be considered preliminary, they are included here to stimulate policy discussions.

Output and Profit Shifts

A recent study of the effect of a recession on small business output ranked the most cyclically sensitive industries during the entire 1955-76 period as follows (in descending order):²³

Sensitivity to Business Cycles

(1) Manufacturing	(HIGH SENSITIVITY)
(2) Wholesale Trade	
(3) Contract Construction	
(4) Transportation, Communication, Public Utilities	
(5) Retail Trade	
(6) Services	
(7) Mining	
(8) Finance, Insurance, and Real Estate	
	(LOW SENSITIVITY)

In the above list, the three most cyclically sensitive industries, manufacturing, wholesale trade, and construction, all reflect shifts in the demand for durable goods over the course of the business cycle. Of these three industries, two of them, wholesale trade and construction, are dominated by small firms. However, retail trade and services, the growing small business sectors which comprise over half of total small business employment, were somewhat less sensitive to the business cycle than construction and wholesale trade. Therefore, a comprehensive measure of the effect of recession on small business output tends to be dominated by the weight

²³ *An Analysis of the Effect of Recessions on Small Business Output*, a report prepared by Joel Popkin and Company (Washington: United States Small Business Administration, July 1981). Prepared under grant no. SBA-1A-000-26-01.

of the retail trade and service industries. Clearly these industries tend to mitigate somewhat the impact of recessions on the entire small business sector. These overall effects do not lessen, of course, the industry-specific increases in business failures observed above, particularly in construction, during the current period.

During the 1974-76 recession, one study observed the increase in business failures which occurred in non-service firms during this period. The author concluded that the death of non-service firms (particularly in durable goods manufacturing) was counterbalanced by the growth of service firms. The conclusion is that service firms took some of the "sting" out of the 1974-76 recession.²⁴

Profits and Their Distribution By Size Class: 1974-76

Very few studies have been conducted on the change in profit levels by size of company during recessions. The latest information which exists tends to support the hypothesis that small firms do not maintain their profit position as well as large firms during periods of economic contraction. The counter-cyclical behavior of service firms notwithstanding, small firms function in a "shock absorber" role during the cycle in reacting to changes over which the firms have little control.²⁵ That is, smaller companies tend to absorb more of the impact of a recession than larger firms. The result is frequently a rapid destruction of the profit position of many small firms during a cycle because of relatively inflexible (or fixed) factors of production. In addition, the various effects of inflation and tight money, as discussed in the next chapter, tend to exacerbate this situation.

During 1974-76 total profits rose for larger businesses and fell for smaller businesses.²⁶ To be more specific, when the percentage

²⁴ Birch, *Corporate Evolution—A Micro-Based Analysis*, op. cit., p.46. Services grew at an annual average rate of 9 percent even during the 1974-76 recession compared to 0.9 percent for total employment.

²⁵ David E. Mills, "Competitive Industry Structure with Demand Fluctuations" (unpublished paper presented at the 1981 annual meetings of the American Economic Association, University of Virginia, December 1981).

²⁶ Popkin, op. cit. Bruce D. Phillips, "Recent Trends in the Distribution of Employment by Business Size and Industry," presented at the annual meeting of the American Statistical Association, Detroit, Michigan, August 10-13, 1981, forthcoming in the *Proceedings of the American Statistical Association, 1981* and published in *Statistics of Income and Related Administrative Record Research*, United States Department of the Treasury, Internal Revenue Service. (Washington: Government Printing Office, October 1981), pp. 77-87. Comparisons are drawn for the period 1972-76, a slightly longer period which should not affect the results.

of profits rose in the construction, transportation, communication and utilities, and service sectors from 1972-76 for large businesses, it fell in the respective small business sectors. (See Table 2.11.) Further, when the share of profits remained constant in the finance, insurance, and real estate industry for large business, it fell in the small business sector. From these data, it appeared impossible for small firms to increase their share of profits during 1974-76 unless the profit share first rose substantially in larger firms. Conversely, declines in profit in large firms frequently had devastating effects on the profit position of small companies.

Another recent study, based upon Federal Trade Commission data during the 1974-76 recession, and funded by the Small Business Administration, showed that in non-durable manufacturing, profits rose in large companies with assets greater than \$5 million and declined in small companies.²⁷ Thus, once again, there appeared to be a shift of profits and sales away from small firms during a recession.

TABLE 2.11 *Changes in the Small Business Profit Share for Selected Industries, 1972-76*

[Percent]

Industry	Small Business Profit Share		Large Business Profit Share	
	1972	1976	1972	1976
Construction	17	16	09	.11
Transportation, Communications, Utilities	10	08	09	.10
Services excl. households	25	21	05	.06
Finance, Insurance, Real Estate	27	22	30	30

Note: Profit is defined as a share of gross product originating, not as a rate of return on investment. Small firms are defined as those with 500 or fewer employees

Source Adapted from Joel Popkin and Company, "Strategy for a Micro-Data Base for Small Business" progress report of March 12, 1980 Prepared for the Small Business Administration under contract no. 2624-0A-79

Job Generation and Recession

The only evidence in this area is based upon unverified data from the Dun and Bradstreet files from 1974 to 1976. As shown in

²⁷ Meni Iamari, *Monitoring the Behavior of Small Manufacturing Firms in the Recession*, a report prepared for the SBA Office of Economic Research (Washington: United States Small Business Administration, March 10, 1981). (The results were not statistically significant in durable manufacturing.)

Table 2.12, establishments under 20 employees continued to generate the majority, that is, 65 percent, of new jobs during the 1974-76 cycle.²⁸ This figure is 39 percent higher than their overall percentage of total employment, and reflects continued growth in the service sector during the recession. The net result of such growth was to leave the employment share in the small business sector virtually unchanged during the recession and preceeding period.

In the Popkin study referenced above, data indicate that the employee compensation component of gross product originating showed no significant trend during the 1955-1976 period when compared with declines in overall gross product originating across all industries. Small firms would have been expected to lay off workers during the cycle; if anything, the opposite seems to be the case.²⁹ Small businesses try to retain key personnel during the business cycle possibly to a greater extent than larger companies. The

TABLE 2.12 — *New Job Creation by Size Class 1974-1976*

Establishment Size Class	Net Job Creation (Percentage change by size class)	Percentage of New Jobs
0-20	5.0	65
21-50	-0.1	—
51-100	-0.9	—
101-500	-0.8	—
501+	4.2	35
Total	2.2	100

Source: Adapted from David L. Birch and Susan McCracken, "Corporate Evolution—A Micro-Based Analysis," MIT Center on Neighborhood and Regional Change, supported by grant 14151 from the Small Business Administration's Economic Research Division, January, 1981, p. 41.

²⁸ Birch, *Corporate Evolution—A Micro-Based Analysis*, op. cit. To put this in perspective, total employment grew 2.4 percent annually from 1970-80, and 0.9 percent annually from 1974-76. Employment in establishments of under 100 employees grew 2.6 percent annually over the 1974-76 period. Small establishments under 20 employees comprised 25 percent of total employment in 1976.

²⁹ Of course, workers in small firms may shift between other small firms during recessions, or start businesses of their own. These trends also appear to occur in spite of the union agreements of the large corporations. Moreover, in certain kinds of small service and high technology firms, differential wages between large and small firms may be substantially lower than in older, more labor-intensive industries, tending to reduce the incentive for releasing personnel during recessions. Clearly this is a complex subject requiring extensive research before definitive statements can be made.

reasons for this may be twofold. The first concerns the specific knowledge of the employees in a small firm, and the difficulties or costs in retraining other workers for the same jobs. The other, possibly more important, explanation involves the "lumpiness" of the factors of production. Briefly stated, a minimum number of workers is needed to maintain an effective business. Without this minimum number of personnel, a business cannot perform its vital functions and ceases to exist.

The Dynamics of Firm Growth and the Need for Longitudinal Analysis

Firm dynamics are concerned with a firm's growth over its entire life cycle and the factors which influence that growth. Little is known about this complex subject since detailed longitudinal data have not been available to provide answers to such questions as the following: Do firms grow steadily or cyclically in various economic sectors or are external factors more important to firm growth than the individual attributes of a firm?

While preliminary research indicates that births and deaths of small firms fluctuate over a wider range than larger firms, it is not yet possible to test plausible explanations. New business formation seems to occur more frequently during a recession, as the unemployed seek to become self-employed. Additionally, according to Dr. Birch, mergers appear to occur at a more rapid rate, often to the detriment of small firms.³⁰

With the unemployment rate at 8.8 percent in January 1982, the importance of small businesses as job generators mandates that the ramifications of Administration policy be carefully understood. Given the paucity of data and analyses on small firms, a major policy concern should be to develop a clear understanding of the dynamics of small firm development over its life cycle.

Considerable efforts are being made to develop an economic data base which will permit longitudinal analysis by firm size and

³⁰ Birch, *Corporate Evolution—A Micro-Based Analysis*, op. cit. Dr. Birch examined changes in employment and in the number of establishments from 1969-76 that were acquired by larger firms during 1969-74. He found that the "shelter" argument of acquisition had little or no validity. Dr. Birch concluded that the number of establishments dying and those losing employees are exactly the opposite of what the shelter argument would predict (i.e., being acquired by a large firm acts to shelter a small establishment from recession). In essence, deaths and contractions of establishments acquired from 1969-74 were three to four times greater than for those entities remaining independent. During a recession small firms have a better survival probability when they remain on their own as opposed to being recently purchased by a larger conglomerate.

industry sector. This work will permit consideration of the creation of a more flexible policy toward small firms.

SECTION IV: LONGER TERM TRENDS IN SALES AND EMPLOYMENT IN THE SMALL BUSINESS SECTOR

An examination of longer-term trends in the composition of sales and employment by business size shows a declining market share of companies with under 20 employees and a rising scale of production necessary for successful market competition. Data indicate that small establishments under 100 employees seem to be growing, and in some cases even thriving, although these businesses are frequently found in industries which have had growth rates below the national average.

Trends by Business Size: Declining Sales and Stable Employment

From 1958 to 1977, the sales share of businesses having under 500 employees declined by roughly 10 percent, and the employment share by 3 percent. Table 2.13 depicts the sales and employment share of firms for eight size classes of companies during this time period. In particular, the small business sales share declined by 4.7 percent during 1972-77 alone, compared to 10 percent during the last 20 years. The employment share declined by less than 1 percent during 1972-77, and by 2.7 percent from 1958-77. These changes are discussed in detail by industry in the next section.

The data in Table 2.13 indicate that a sales shift from companies of under 20 employees to larger firms (those with over 500 employees) has been occurring. Column six of Table 2.13 illustrates that firms with 0-19 employees lost 4.5 percentage points of their share of sales from 1972 to 1977, and firms with more than 5000 employees gained part of this percentage.³¹ The remaining shares were absorbed by companies between 500 and 5000 employees. In the small business sector, very small companies, which lost about one-third of their sales share between 1958 and 1977, are in an accelerating downslide, and very large business would seem the beneficiary.

³¹ Inter-firm transfers of sales shares were not available. In addition, a market transfer could only be measured if absolute sales were identical for very small and very large enterprises. In fact, the sales of the 5000+ companies exceed those of the under 20 employee companies by a ratio of approximately 2:1 in the aggregate.

TABLE 2.13 —*Distribution of Sales and Employment
by Employment Size of Firm, 1958-77*

[Percent]

Employment Size Class	Year					Change: 1977 - 1972
	1958	1963	1967	1972	1977	
	Sales					
Small Business						
0 - 19	30.9	28.1	26.4	25.7	21.2	-4.5
20 - 99	17.9	17.9	18.0	18.6	18.2	-0.4
100 - 249	7.5	7.2	7.7	7.1	7.4	0.3
250 - 499	4.7	4.4	4.8	4.6	4.5	-0.1
Total Small Business	(61.0)	(57.6)	(56.9)	(56.0)	(51.3)	(-4.7)
Large Business						
500 - 999	4.0	4.3	3.9	4.0	4.4	0.4
1,000 - 2,499	5.2	5.1	4.9	5.2	5.7	0.5
2,500 - 4,999	4.1	4.2	4.1	4.1	5.0	1.1
5,000 or more	25.7	28.8	30.2	30.8	33.6	2.8
Employment						
Small Business						
0 - 19	23.3	22.4	21.7	22.0	21.6	-0.4
20 - 99	18.0	17.6	18.3	19.2	18.5	-0.7
100 - 249	8.3	7.9	8.0	7.6	7.6	0.0
250 - 499	5.6	5.1	5.2	4.6	4.8	0.2
Total Small Business	(55.2)	(53.0)	(53.2)	(53.4)	(52.5)	(-0.9)
Large Business						
500 - 999	4.9	4.7	4.2	4.0	4.2	0.2
1,000 - 2,499	6.4	5.9	5.3	5.1	5.2	0.1
2,500 - 4,999	4.9	5.1	4.4	4.3	4.5	0.2
5,000 or more	28.6	31.3	32.9	33.2	33.6	0.5

Source: Department of Commerce, Bureau of the Census, *Enterprise Statistics*, various issues.

A similar finding on the transfer of market share from very small companies to larger firms was reported by Joel Popkin in a study measuring the share of GNP contributed by firms of varying

sizes.³² The GNP share contributed by firms with under 20 employees declined by 3 percentage points between 1963 and 1972, and the GNP share of companies with over 5,000 employees rose.³³ When these changes were analyzed by the five major components of gross product originating,³⁴ the largest decline occurred in the share of profit flowing to the 0-19 employee companies.³⁵

Employment Stability

The small business sector has shown relative employment stability, despite its falling share of GNP. (See Table A2.5.)³⁶ The employment share of companies with under 500 employees was only 2 percentage points lower in 1977 than it was in 1958, 55.2 percent versus 52.5 percent, respectively. The changes that did occur were generally confined to the one size group of under 20 employees.³⁷ In the aggregate there has been little movement in the employment share of small firms.

In contrast, from 1967-77 the small business share of sales, employment and GNP declined in all of the six industry divisions included in the economic censuses for those years. The stability of employment exhibited by all small business is not an indication that firms with declining sales and profits are stable as individual entities. Several offsetting trends may have caused this fairly constant employment share. These include the difficulty of releasing employees during economic contractions coupled with large expansion in the service sector, which may have offset declines in the non-service traditional small business industries, such as retail trade.

³² *Measures of Gross Product Originating in Businesses with 0-19 Employees and 5,000 or More Employees, 1963 and 1972 Task 9*, a report prepared by Joel Popkin and Company (Washington: United States Small Business Administration, December 1981). Funded by SBA under contract no. 2624-OA-79.

³³ *Ibid.*

³⁴ The components are employment compensation, net interest payments, indirect business taxes, capital consumption allowances, and profit.

³⁵ Popkin, op. cit. Table 2.

³⁶ *Gross Product Originating in Small Business. Preliminary Estimates for 1976 and Revised Estimates for 1972 and 1963*, a report prepared by Joel Popkin and Company (Washington: United States Small Business Administration, 1979), under contract no. SBA-2624-OA-79.

Gross National Product Trends by Industry within the Small Business Sector

As with many aggregate statistics, the totals mask the relationships that occur at the major industry level. From the late 1950's to the mid 1960's, small businesses with 500 or fewer employees had a declining share of GNP in the construction, manufacturing, trade, services, and mining industries.³⁸ Their share increased only in transportation, communications, and utilities and in finance, insurance and real estate. (See Table A2.5.) Small business generally did not make gains in GNP shares if the share of the industry division of which it was a part was constant or declining.

Small business GNP declined from 1955 to 1963 in every major industry except the transportation and finance sectors, which were the two industries with the smallest share of small firms.³⁹ In mining and manufacturing, the small business GNP shares of the respective industries declined 8 and 5 percentage points, respectively, between 1955 and 1963. The shares of total GNP for those divisions were also declining. In construction and trade, small business GNP decreased 3 and 5 percentage points, respectively, while the industry division shares of the total were constant. In the service sector the small business GNP share decreased slightly as the division share grew. In transportation, communications, and utilities, small business GNP grew as the industry division share declined.

Recent Declines in the Small Business Share of GNP: 1967-77

The small business share of GNP shifted from 42 percent in 1967 to an estimated 38 percent in 1977. These aggregate statistics include the two industry divisions of transportation, communication, and utilities; and finance, insurance, and real estate. From 1967 to 1977 significant downtrends in the small business shares occurred in manufacturing, mining, wholesale trade, retail trade, and finance. Smaller declines occurred in construction, services, and transportation. Retail trade, the industry that includes almost one-third of small enterprises, showed the largest decline: 8 percentage points. Also, instead of gaining in their share of GNP as their numbers increased, small service businesses experienced a

³⁷ Even in companies of under 20 employees, employment compensation has declined very little. Changes in employment by major industry and three size classes on a micro-basis between 1972 and 1977 are found in Table A2.6.

³⁸ Popkin, *op. cit.*, see Appendix Table A2.5.

³⁹ Popkin, *op. cit.*

drop of 2 percentage points in their share. Thus the small business share of GNP declined in all sectors from 1967 to 1977. No sector of small business can be characterized as a leading sector or a growth point for the period 1967-77. Even in the area of services where small business appears to do best, the absolute share of GNP produced by this sector declined.

Recent Trends in Industry Employment: 1967-77

Falling shares of small business GNP in most industries have been associated with falling sales and profit shares but relatively constant employment shares. For major industries, the small business employment share was essentially constant between 1967-77. Between 1972 and 1977 it rose in four major sectors: construction, manufacturing, transportation, and finance. It declined in mining, agriculture, wholesale and retail trade, and services.⁴⁰ With the exception of mining, the latter are the traditional "small business industries." Of those industries traditionally dominated by small firms, retail trade had the largest decline in GNP share from 1970 to 1976. Once again, this constancy of employment shares reflects growth trends by major industry.

As with changes in small firm GNP, changes in aggregate employment obscure changes at the level of the individual firm. As indicated in Table A2.6, mining firms, with a declining proportion of small firm employment, added 47 employees per firm on the average between 1972 and 1977, while service and retail trade firms averaged about 30 new employees per firm.⁴¹ Only through individual firm data can the impact of employment changes on factor costs be studied in a meaningful manner.

The relatively large decrease in the GNP share of retail trade is most apparent in the 0-4 employee size class. It would seem that the efficient scale of operations has risen significantly and that the very small "mom and pop" type operations can no longer compete with large chain operations.⁴² Further evidence of the disappearance of very small business operations comes from the data in the Census Bureau's *Enterprise Statistics* on zero-employee firms.⁴³ Ta-

⁴⁰ Phillips, *op. cit.*

⁴¹ Appendix Table A2.6 is derived directly from the Small Business Data Base.

⁴² Alvin D. Star, *Concentration in Retail Trade and Services*, a report prepared by Alvin D. Star, Consultant, (Washington: United States Small Business Administration, 1979), under contract no. SBA-2649-0A-79.

⁴³ A zero-employee firm is a business consisting of an owner who has an employee part of the year, but not during the week the Census Bureau takes its sur-

ble 2.14 shows changes in sales and employment shares in zero-employee firms from 1967 to 1977. The decline in sales shares is seen in construction and services, where declining sales shares were accompanied by rising numbers of zero-employee firms, indicating declining sales per enterprise. Therefore, as with companies that have wage and salary employees, zero-employee firms have also experienced declines in sales with increasing numbers of firms.

The role of mergers and acquisitions in reconciling these sales and employment trends is uncertain. The Phillips study referred to earlier indicates a consistency between consolidations by large firms in growing industries between 1972-77, and declines in the market share of small firms in growth industries. The cause and effect relationships are not well-defined, and a study showing how merged firms pool their assets and personnel should be conducted before a substantive statement is made.⁴⁴

TABLE 2.14—*Share of Employment and Sales of Zero-Employee Firms, 1967, 1972 and 1977*

(Percent)			
Employment	Shares		
	1967	1972	1977
Construction	58.26	55.61	60.36
Retail Trade	43.16	48.07	37.79
Services	62.34	65.66	65.41
Sales			
Construction	7.53	4.94	6.76
Retail Trade	6.54	6.30	3.22
Services	11.76	13.25	8.66

Source: Department of Commerce, Bureau of the Census, *1977 Enterprise Statistics, General Report on Industrial Organization*, Table 3; *1972 Enterprise Statistics, Part I, General Report on Industrial Organization*, Table 3; and *1967 Enterprise Statistics, Part I, General Report on Industrial Organization*, Table 3-1.

vey. These zero-employee firms were 48 percent of total companies covered in the Enterprise Statistics program of the Bureau of the Census in 1977.

⁴⁴Phillips, op. cit. The merger data was based on the last comprehensive Census survey of mergers and acquisitions in 1976, and is not totally representative of the entire time period of 1972-77.

Summary of 1967-77 Sales and Employment Trends

The changes from 1967-77 in shares of large and small enterprises are summarized in Table 2.15. The bottom half of Table 2.15 separates the small business enterprises which are defined as firms with under 500 employees into companies with 1-99 employees, and 100-499 employees.

TABLE 2.15—*Small and Large Shares of Number of Businesses, Sales, Employment and GNP, 1967-1977*

Small Business Enterprises under 500 Employees	Large Business Enterprises over 500 Employees
1. A constant share of total businesses (Approximately 99 percent of the total and industry divisions.)	1. A relatively constant share of total businesses (A fraction of 1 percent of the total in all industry divisions except manufacturing which was roughly 1 percent.)
2. A declining share of sales or receipts (Shift from 57 to 52 percent of total with declines for all industry divisions.)	2. An increasing share of sales or receipts (Shift from 43 to 48 percent of total with increases for all industry divisions and substantial gains in small business areas of trade and construction.)
3. A small decrease in share of employment (Shift from 53 to 52 percent in total with decreases for all industry divisions.)	3. An increase in share of employment (Shift from 47 to 48 percent in total with increases for all industry divisions and significant increases in small business areas of trade, services and construction.)
4. A declining share of private sector GNP (Shift from 52 to 48 percent in total with decreases in all industry divisions.)	4. An increasing share of private sector GNP (Shift from 48 to 52 percent of total and increases for all industry divisions with substantial gains in trade, and finance, insurance and real estate.)

Small Business

[Enterprises in 1-99 Employee Class]	[Enterprises in 100-499 Employee Class]
1. Slight decline in share (percent of businesses) from 52 to 51 percent but with increase in retail trade share.	1. Small decline in share of businesses with irregular change in industry division shares.
2. Decline in sales share from 42 to 39 percent but with increase in construction.	2. Decline in sales share from 13 to 12 percent but with gains in share of retail trade, services and manufacturing.
3. Slight increase in employment share with decreases in most industry division shares.	3. Decline in employment share from 13 to 12 percent but with increases in retail trade and service shares.

SECTION V: STATE EMPLOYMENT GROWTH 1977-79

During 1977-79, the total employment growth (change in the number of jobs) of the ten fastest growing states in the United States ranged from 33.2 percent in Wyoming to 16.2 percent in Mississippi.⁴⁵ As seen in column three of Table 2.16, the fastest-growing states were all concentrated in the Western part of the United States. With a few exceptions, the pattern of growth in establishments with under 100 employees followed this same trend, as shown in columns 1 and 2 of the top half of Table 2.16. The exceptions which deserve mention were the unexpected growth of small establishments with under 20 employees in Idaho, and those with under 100 employees in Maine. In both of those states, however, the loss of large establishments with over 500 employees was responsible for the very high growth observed in the small business sector. The overall impression from the data is that rapidly growing states also experience rapid small firm growth.

The percentage of growth accounted for by small establishments under 100 employees is generally larger in the rapidly growing states than in the rest of the country, although there is substantial variation. For example, from 1977-79, establishments under 100 employees, which account for roughly 49 percent of employment growth nationally, accounted for 85 percent in Wyoming, 64 percent in Colorado, 61 percent in Florida, and 54 percent in Arizona. In general, then, the growth of employment in small firms forms a larger proportion of total growth than employment expansion in large establishments in rapidly growing areas. This variation in the percentage of growth accounted for by small establishments is directly related to the proportion of heavy industry within an area, which is almost always conducted in larger establishments.

Table 2.17 indicates the net employment change from 1972 to 1977 in three size classes of firms: 1-9 employees, 10-99 employees, and 100-499 employees. The data indicate how many employees, on the average, were added to the firms in each state and size class during this period. Firms were classified according to their employment size class in the base year in Table 2.17. A small firm with four employees in 1972, which grew to 15 employees in 1977 would still be shown in the 1-9 size class in the table. Therefore, statements of negative growth reflect real decreases in average company size. For example, for the U.S. as a whole, all firms of 1-9

⁴⁵The U.S. average for this period was 11.8 percent based on the Unemployment Insurance (UI) file of the Department of Labor, Bureau of Labor Statistics.

TABLE 2.16 — *Ten States of Fastest and Ten States of Slowest Employment Growth in Small and Total Establishments, 1977-79*

Establishment Employment Size

<u>Small Establishment Size Class¹</u>			
Column 1:		Column 2:	Column 3:
Rank:	Under 20 Employees	20-99	All Size Classes
<u>Fastest-Growing States, 1977-1979</u>			
(Descending Order)			
1	Wyoming	Wyoming	Wyoming
2	Nevada	Arizona	Arizona
3	Florida	Nevada	Nevada
4	Arizona	Florida	Florida
5	California	Colorado	Oregon
6	Colorado	New Hampshire	Washington
7	Oregon	Oregon	Colorado
8	Washington	Washington	California
9	Mississippi	California	Texas
10	Idaho	Maine	Mississippi
<u>Slowest-Growing States, 1977-1979</u>			
(Descending Order) ²			
1	Iowa	Alaska	Alaska
2	Illinois	District of Columbia	West Virginia
3	New York	Illinois	Rhode Island
4	West Virginia	Hawaii	New York
5	Rhode Island	Iowa	Maine
6	South Dakota	New York	Delaware
7	Wisconsin	Nebraska	Nebraska
8	Ohio	Rhode Island	Iowa
9	Nebraska	Pennsylvania	Pennsylvania
10	Michigan	Wisconsin	Vermont

¹ Small establishments are defined as those with less than 100 employees.

² Descending order means the fastest (slowest) growth state is ranked first.

Source: Small Business Administration, Office of Advocacy, Small Business Data Base, based upon the Unemployment Insurance (UI) System, of the Department of Labor, Bureau of Labor Statistics, unpublished data.

employees lost 0.2 employees on the average, while the average gain of firms with 10-99 employees was 2.1 employees. For those with 100-499 employees the gain was 22 employees. The states with the fastest employment additions to their firms (see Table 2.16) correspond almost totally with the data in Table 2.17.

Some of the fastest-growing states in the largest size category of 100–499 employees, such as Arkansas and New Mexico, do not appear in the list of the ten fastest-growing states in Table 2.16. However, they are in the second ten fastest-growing grouping. Table 2.17 translates the aggregate-type observations above to the level of the individual firm. For example, the high growth shown in Wyoming means a net employment increase of about five employees per company during the 1972–77 period. Total employment growth would reflect this increase in employment in existing firms,

TABLE 2.17 — *Average Net Employment Change by State and Employment Size, 1972–1977*

State	Employment Size Class ¹		
	1–9	10–99	100–499
United States Average	–0.16	2.1	22
Alabama	–0.11	2.3	24
Alaska	2.22	7.6 @	39 @
Arizona	–0.24	1.6	17 *
Arkansas	–0.13	3.1	–4 *
California	–0.11	2.7	30
Colorado	–0.07	3.6 @	31
Connecticut	–0.24	1.4	17 *
Delaware	–0.26	1.3 *	8 *
Dist. Col.	–0.65	1.4	14 *
Florida	–0.38	1.0 *	13 *
Georgia	–0.30	1.2 *	19
Hawaii	–0.31	0.0 *	35 @
Idaho	0.30	4.2 @	28
Illinois	–0.15	2.0	18
Indiana	0.01	2.0	17 *
Iowa	–0.06	2.3	29
Kansas	–0.10	3.0	37 @
Kentucky	–0.04	2.4	30
Louisiana	0.0	3.2	30
Maine	–0.14	2.7	21
Maryland	–0.21	1.3	24
Massachusetts	–0.43	1.5	22
Michigan	–0.22	1.9	18 *
Minnesota	–0.05	3.1	33
Mississippi	–0.07	1.8	20
Missouri	–0.12	1.2 *	24
Montana	–0.09	3.3	59 @
Nebraska	–0.08	2.8	22
Nevada	–0.07	3.8 @	38 @
New Hampshire	–0.21	2.7	19
New Jersey	–0.27	1.3	23
New Mexico	–0.13	4.2 @	51 @
New York	–0.23	1.2 *	20
North Carolina	–0.27	0.9 *	12
North Dakota	0.20	3.6 @	35 @
Ohio	–0.24	1.8	20

TABLE 2.17 (Continued)—Average Net Employment Change
by State and Employment Size, 1972–1977
Employment Size Class¹

State	1–9	10–99	100–499
Oklahoma	–0.13	3.5	38 @
Oregon	–0.07	3.7 @	33
Pennsylvania	–0.22	1.4	18
Rhode Island	–0.30	1.3 *	30
South Carolina	–0.25	1.6	9 *
South Dakota	0.07	3.1	20
Tennessee	–0.19	0.9 *	18
Texas	–0.12	3.1	36 @
Utah	0.29	4.0 @	45 @
Vermont	–0.19	2.4	19
Virginia	–0.40	1.3	25
Washington	–0.07	3.9 @	25
West Virginia	–0.05	2.7	34
Wisconsin	0.00	3.1	23
Wyoming	0.15	4.5 @	33

¹ Small businesses are defined as firms with less than 500 employees.

*One of the ten smallest net employment changes from 1972 to 1977 for this firm employment size category.

@One of the ten largest net employment changes from 1972 to 1977 for this firm employment size category.

Source: Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet's Market Identifier File.

plus additions to employment from new business startups during the period.

The slowest-growing states from 1977 to 1979 were generally located in the New England and Middle Atlantic Regions of the United States. The only exceptions were in the Plains States of Nebraska and Iowa. In general, the slowest-growing small establishments were also confined to these states, with several exceptions.

Maine, Delaware, and Vermont, although among the 10 slowest-growing states, experienced moderate growth in their small business sectors. In Maine and Delaware, the large establishments with over 500 employees that left the state appear to have been partially replaced by small establishments under 100 employees.

Table 2.17 shows what slow growth means at the firm level for those companies that were in business in 1972 and again in 1977. For example, within the 10–99 size class, the rapidly growing states added three to four employees per company during this period, while the slowest-growing states added between one and two employees, or roughly one-half the increase of the high growers. If

the average numbers in Table 2.17 were multiplied by the appropriate baseline numbers of firms, a direct estimate of that portion of employment growth due to expansion would result.⁴⁶

A final summary measure on the economic health of states from 1972 to 1977 is a ratio of the percentage of firms increasing employment to the percentage decreasing employment, for those firms existing in both 1972 and 1977. For the country as a whole, an equal number of firms with under 10 employees gained and lost employees; for those firms with 10-99 and 100-499 employees, the comparable ratios were 2.2 and 2.7, respectively. Thus the larger firms were three times as likely to increase employment as smaller firms.⁴⁷

Many of the largest states, excluding Texas and California, are losing employees in the smallest size firms. The gainers, once again, seem to be in the rapidly growing smaller states like Nevada and Wyoming. In the larger size classes the states in the Western part of the country seem to be adding employees fastest, such as in Utah, Oregon, Oklahoma, Texas and Washington. The states on the East Coast, such as Delaware, Maine, Massachusetts, and Rhode Island, as well as the District of Columbia, are adding employees at the slowest rate.

SECTION VI. SUMMARY

In the United States, dynamic economic change is a certainty. For the small business sector this has meant continued growth in the number of enterprises in most sectors of the economy, with the largest recent growth in the service sector. Small businesses have continued to generate millions of new jobs. Yet the future survival of the smallest businesses in this country, those with less than 20 employees, has come to be less certain. The number of small establishments in retail trade and manufacturing has declined due to the larger scale of output needed for successful competition, and the numerous regulations and taxes imposed on small firms.

It is possible that scale economies combined with increasing fixed costs of regulation have made it more difficult to operate a very small business. The statistical evidence on new business formation, however, indicates that businesses continue to form at a rate of about 2 to 4 percent annually. This appears to be true even during

⁴⁶ Absolute data are not shown because the data in Table 2.17 are based on only a sample of records from the Small Business Data Base rather than a universe count, which is unavailable for both of those years.

⁴⁷ See Table A2.7-A2.9.

recessions. In addition, both the number of businesses with employees and the number of businesses operated by self-employed persons are increasing at approximately equal rates.

The recent large increase in the number of self-employed persons may call into question some of the significance of the decline in very small establishments. A transfer may be occurring from wage and salary employment in very small establishments to self-employment on a continued basis. However, the significance of this trend on the small business sector has not yet been analyzed.

In the aggregate, the GNP share of the small business sector (enterprises with less than 500 employees) is declining, particularly in companies with under 20 employees. From 1967-1976, declines were observed in virtually all the major sectors of the economy, but particularly in the traditional small business industries of retail trade, construction, and services. These shifts have resulted in a deteriorating profit position for many small firms of under 20 employees and has increased the likelihood of business failure. The severe inflation of the 1970's, coupled with increases in the severity of recent downturns, may have magnified recent losses in the sales share of small firms. The latest evidence, for example, is that total business failures have risen about 30 percent during the past year.

The picture that gradually emerges is that job generation is an industry-specific phenomena: small firms in one sector (such as services) may be quite stable and growing while those in another (such as retail trade) may be vulnerable. It is the employment increase in sectors such as services and construction that more than compensates for employment declines associated with smaller establishments of under 20 employees in sectors such as retail trade and manufacturing. The growth in service employment, particularly, moderated the effect of the 1974-76 recession on small firms, and allowed them to continue to generate a majority of new jobs even during a recessionary period.

Despite the pressure on many segments of the small business community, data from *Enterprise Statistics* indicate that many companies in the 20-500 employment range are coming closer to maintaining their employment and sale shares. Excluding the 0-19 employee-sized businesses, there has been overall stability from 1967-1977 in the sales and employment shares of these somewhat larger firms. These firms have led the increased growth in the service sector, the fastest-growing industry both for small firms and for the economy in general.

It is difficult to identify businesses which dissolve, be they small

or large. Because most small businesses disappear with no loss to creditors, no record is kept of the closings. New data series are needed to determine what happens to businesses during business fluctuations. Because of their inability or reluctance to change production mixes during periods of contraction, small firms frequently function in a shock absorber role; the major result of this inflexibility is a profit decline and subsequent business failure.

At the state level, small firms are growing at a rapid rate in several areas: in the energy extractive states like Wyoming, in booming retirement areas like Florida, and in areas of the rapidly growing Western part of the country, such as Nevada, where leisure service industries tend to dominate. In general, small firms are concentrated in the growth industries in those states which experienced the fastest rates of growth from 1977-79.

CHAPTER III

Financial Developments and the Small Business Sector

Major developments affecting the relative position of small business in each industry were presented in the preceding chapters. This chapter discusses the major macroeconomic forces that impact on the small business sector in the American economy.

In the last 15 years, the United States economy has experienced a period of rising inflation and rising interest rates accompanied by periods of recession. In the paragraphs below, the economic developments which have contributed to this situation are reviewed and the fundamental changes in economic policy which have been formulated to combat these trends are examined. The implications of these developments to the health of the small business sector are also explored.

Section I discusses the impact of rising inflation and interest rates on the financial condition of the small business sector. Trends in profit rates and in increased borrowing by small businesses are also discussed.

Section II examines the impact of business cycles in general on small businesses. Changes in business failures, employment, sales and profits during a recession are observed. While the experiences of small firms during the 1974-76 recession were examined in several aspects in Chapter II, the discussions in this chapter on firm performance during the cycle are somewhat more general in nature, refer to cyclical changes in additional time periods, and stress the role of monetary policy during cycles to a greater extent.

Section III discusses the implications of the changing financial markets for small business financing, such as the increasing conglomeration of the financial service industry as a result of deregulation, the increasing use of the variable rate loan arrangement, and the impact of a large Federal deficit.

SECTION I. A DECADE OF RISING INFLATION, UNEMPLOYMENT, AND INTEREST RATES

The rising trends in the rates of inflation, unemployment, and

interest rates during the past 15 years are well known and are presented in Table 3.1. Both interest rates and the rate of inflation have reached historical highs during the past 30 to 40 years, and the rate of unemployment reached the high level of 8.8 percent in December 1981. The coexistence of high inflation and high unemployment exemplifies the failure of the economic policy of the past several years. The so-called trade-off between the rate of inflation and the rate of unemployment no longer exists. Monetary and fiscal policies designed to stimulate an increase in aggregate demand for goods and services only temporarily reduce unemployment, but cause a long-lasting increase in the level of prices. Interest rates do not stay low in an inflationary economy. The market rates will approximate equilibrium only when the rates of return to savers/lenders fully compensate for (a) changes in the purchasing power of money, (b) remuneration for the deferred consumption, and (c) the risk of a specific lending-borrowing arrangement. The long-term rise in the interest rate during the past 15 years is the result of inflationary expectations.

TABLE 3.1 *Changes in the Rates of Inflation, Unemployment Rate and Interest Rates, 1965-1981*

	Change In GNP Deflator	Unemployment Rate- All Workers	Interest Rates	
			Prime	Corporate Bonds-Baa
1965-67	2.8	4.0	5.3	5.6
1968-70	5.0	4.0	7.4	8.0
1971-73	5.0	5.5	6.3	8.3
1974-76	7.7	7.3	8.5	10.0
1977	5.8	7.0	6.8	9.0
1978	7.3	6.0	9.1	9.5
1979	8.5	6.8	12.7	10.7
1980	10.9	7.1	15.3	13.7
1981-3Q	9.4	7.5*	20.1*	16.9*
1981-4Q	8.4	8.8**	15.8**	16.6**

*For September, 1981

**For December, 1981

Source. Department of Commerce and the Board of Governors of the Federal Reserve System

Volatile Fluctuations in the Business Cycle

Many factors, including excess and erratic monetary growth, poor harvests, price controls, and crude oil price increases, have

contributed to present and past inflation. However, it is generally accepted that an expansionary monetary policy was primarily responsible for the high inflation of the 1970's. Annual rates of growth of the target monetary aggregate M1-B have increased from approximately 5 percent during the early 1970's to over 8 percent during 1977-79 before slowing to 6.6 percent and about 5 percent during 1980 and 1981 respectively.¹ The U.S. economy has

TABLE 3.2—*Changes in Economic Indicators from Peak to Bottom During Business Cycles, 1957-1981*

Recession* of	Index of 4 Concurrent Indicators	Index of 12 Leading Indicators	Rate of Unemployment	Index of** Industrial Production
1957-58				
Peak	70.2	68.1	3.9	63.1
Bottom	61.4	62.5	7.5	55.1
Changes	-12.5	% -8.2	% +92.3	% -12.7%
1960-61				
Peak	72.0	75.7	5.1	68.8
Bottom	67.1	70.1	7.1	62.9
Changes	-6.8	% -7.4	% +39.1	% -8.6%
1969-70				
Peak	112.4	111.8	3.4	112.5
Bottom	105.4	103.4	6.1	104.8
Changes	-6.2	% -7.5	% +79.4	% -6.8%
1974-75				
Peak	129.7	133.4	4.6	131.6
Bottom	112.3	106.4	9.0	111.7
Changes	-13.4	% -20.2	% +96.7	% -15.1%
1980				
Peak	146.1	143.2	5.6	153.0
Bottom	136.5	123.0	7.6	140.3
Changes	-6.6	% -14.1	% +35.7	% -8.3%
1981				
Peak	142.6	137.5	7.0	153.9
Bottom	136.6	129.4	8.9	143.3

*Peak and bottom are defined as when the series of the selected index reaches the high and low during the respective cycle.

**Industrial production index is included in the concurrent indicator index.

Source: Computed from *Business Conditions Digest*, various issues, U.S. Department of Commerce.

¹ M1-B is defined to include public holdings of (a) demand deposits, (b) currency, (c) traveler's checks, and (d) negotiable orders of withdrawal and automatic transfer service accounts at all depository institutions.

also experienced more volatile cyclical fluctuations during the past 15 years because of high inflation and the associated high interest rates, as indicated in Table 3.2. It appears that the effectiveness of short-term policies for economic recovery has been lessened by the public's anticipation of the long-term implication of these policies.

Small Business in an Economy of High Inflation

It is apparent that businesses perform best in a stable and growing economy. Most businesses engaged in nonspeculative, long-term productive activities have been seriously hurt by the inflation of the past decade, despite an apparent rising business profit generated by these businesses. During an inflationary period, the nominal profit rate is a poor indicator of the return on capital for a business enterprise. Inflation creates illusory profits because of (a) understatement of the inventory cost, (b) inadequate capital consumption allowances, and (c) overstatement of the purchasing power of financial assets held by businesses.

As a going concern, the profitability of an enterprise should be evaluated on the basis of its prospects for future profitability in real terms. A strong balance sheet position in real terms assures earning capability. When the future purchasing power of business firms was taken into account, the profitability of American businesses was poor in the 1970's. Inflation adjusted rates of return on corporate assets were mostly negative.² The rising inflation in the past 15 years has been accompanied by falling real rates of return.

Inflation increases the dollar value of sales without being accompanied by a growth in the volume of sales. Larger sales require larger accounts receivable and larger inventories. This increases the need for additional cash inflow, either from more retained earnings, from additional equity investment, or from more borrowing. Ideally, if profits increase proportionately relative to increases in accounts receivable, inventories, and liabilities, the debt ratios for the concern should not deteriorate.

In reality, business profits, and, consequently, retained earnings, lag behind the increases in other items. Since an increase in dollar value of various asset items is not matched by increased retained

² See, for example, Martin Feldstein and Lawrence Summers, "Inflation and the Taxation of Capital Income in the Corporate Sector," *National Tax Journal*, December, 1979, David Hall, "Adjusting Tax Policies for Inflation," *Financial Analysis Journal*, November/December 1978.

earnings, additional indebtedness is incurred by businesses to finance the increase. Consequently, the debt-equity ratio of the firm deteriorates. As a wood products distributor put it, "During the past fiscal year, the total of the inventory plus the accounts receivable increased \$186,000. Our total debt increased \$184,000. During the year, our total debt increased to the point where it now amounts to about \$91,000 more than our total net worth. The increase in the value of the inventory and the accounts receivable is occasioned almost entirely by inflation."

In a period of rising inflation, businesses increase debt financing in an effort to resist declines in the real rates of return on equity. These efforts are successful when the rate of return on assets exceed the cost of borrowing. However, these efforts also increase the debt-equity ratio, causing these firms to be vulnerable to unexpected changes in business activities.

Like large corporations, small businesses cannot escape the harmful impact of inflation on their financial condition. In addition, they are likely to be much more seriously affected because of several business and financial characteristics found in many small businesses. For example, a larger percent of their indebtedness is in short-term debt which needs to be renegotiated at current interest rates.

Further, many small businesses have been reluctant to switch to the Last-In-First-Out (LIFO) inventory system. They have also been less able to take advantage of various special depreciation allowances for tax purposes. Although the IRS has attempted to remedy the unfavorable impact of inflation on business profits by various accounting provisions, most small businesses have as yet been unable to take advantage of these provisions. It has been difficult and expensive for small businesses to set up a LIFO system of accounting or to take full advantage of depreciation allowances sanctioned by the IRS. Statistics indicate that only a very small percent of small businesses have switched to replacement cost accounting. Consequently, most small businesses are still paying taxes on illusory inflation-generated profits. The Economic Recovery Tax Act of 1981 (ERTA) addresses these problems and includes the following provisions to encourage use of the LIFO inventory system by small businesses:

- Permits the income attributable to the increase in inventory value, which is required when LIFO is elected, to be spread over three years;

- Permits small businesses to use one inventory pool rather than a separate pool for each inventory line;
- Requires the Treasury Department to develop and publish indices for LIFO calculations; and
- Requires the Treasury Department to review LIFO accounting and cash accounting to recommend simplifications in the systems.

Finally, small businesses appear to be less able to adjust selling prices quickly in response to rising costs. Further, many small firms, especially the very small ones, do not use price forecasts to their advantage. In many cases they adjust prices after the costs have increased rather than adjusting the price in anticipation of the cost increase.

It is not possible to quantify the impact of inflation on small businesses because data on the financial condition of this sector are generally unavailable or are available only on a piecemeal basis. In many cases data are limited to information obtained from opinion surveys. For example, in a survey initiated in 1974 and conducted quarterly by the National Federation of Independent Business (NFIB), with only one exception, small independent business owners ranked inflation as the single most important problem facing them. Only in the July 1981 survey did the problem of high interest rates move ahead of inflation as the most serious problem reported by small business owners. Table 3.3 summarizes the survey results from 1971-81.

The only time-series data source that allows a careful study of the effects in inflation and high interest rates on the financial condition of small business is the *Quarterly Financial Reports for Manufacturing Corporations* published by the Federal Trade Commission (FTC). Tables 3.4 and 3.5 provide an historical comparison of the rates of return for large versus small manufacturing corporations for the durable and non-durable goods industries. While it is evident that the rates of return, as measured either by after-tax profits per dollar of sales, or after-tax profits per dollar of equity, have declined from 1979 to 1980, they are comparable to the levels of 1970-72 and 1975-76.³

³ Although the rates of return recovered substantially during the second quarter of 1981, the recovery appeared to be short-lived.

TABLE 3.3—Single Most Important Small Business Problem, 1974-1981

Most Important Problem	1974			1975			1976			1977			1978			1979			1980			1981		
	Jan Rank	%	July Rank	%	Jan Rank	%	July Rank	%	Jan Rank	%	July Rank	%	Jan Rank	%	July Rank	%	Jan Rank	%	July Rank	%	Jan Rank	%	July Rank	%
Taxes	3	10	3	10	3	11	2	19	2	17	2	22	2	21	2	19	2	22	2	21	2	15	2	15
Inflation	2	23	1	36	1	37	1	27	1	28	1	25	1	24	1	27	1	25	1	33	1	36	1	26
Inadequate Demand for Protection	9	2	9	1	9	1	6	6	8	5	8	3	8	4	7	5	8	3	8	2	9	2	8	3
Interest Rates																								
Financing	5	8	2	12	2	13	4	8	5	8	5	7	7	5	8	4	7	5	5	7	3	11	3	9
Min. Wage Labor Cost	8	3	8	4	7	4	8	5	6	6	6	6	5	7	5	8	4	8	5	7	6	5	7	4
Other Govt. Reg./Red Tape	5	8	5	8	4	9	3	12	3	13	3	14	3	12	3	12	3	10	4	9	3	9	4	8
Competition from Large Business	5	8	5	8	5	8	4	8	4	10	4	9	4	10	4	9	4	8	7	6	5	7	6	5
Quality of Labor	3	10	5	8	6	5	6	6	6	6	7	5	6	6	6	7	6	7	4	8	5	7	5	6
Shortage of Fuel, Goods or Material	1	23	4	9	7	4	9	2	9	1	9	1	9	2	9	1	9	1	9	1	6	5	8	3
Other																								
No Answer	—	5	—	4	—	8	—	7	—	6	—	8	—	9	—	8	—	5	—	5	—	5	—	5
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Quarterly Economic Report for Small Business, National Federation of Independent Business, various editions.

*Less than 1 percent.

TABLE 3.4—After Tax Profits per Dollar of Sales for Manufacturing Corporations, 1970-1981

	All Manufacturing				Durable Goods				Non-Durable Goods			
	All Sizes	Asset Under 5 M *	Asset 5-10 M	Asset 10-25 M	All Sizes	Asset Under 5 M	Asset 5-10 M	Asset 10-25 M	All Sizes	Asset Under 5 M	Asset 5-10 M	Asset 10-25 M
1970-4Q	3.7	0.1 1.9	2.3	2.5	3.1	1.0	2.4	2.6	4.4	0.8	2.1	2.4
1971-4Q	4.1	1.1 2.2	3.4	2.7	3.8	1.5	3.6	2.8	4.3	1.7	3.3	2.7
1972-4Q	4.4	2.4 2.6	3.4	3.2	4.3	2.6	3.9	3.5	4.5	2.4	2.9	2.9
1973-4Q	5.6	2.4 3.4	3.3	3.6	5.0	3.5	4.1	4.3	6.1	2.5	2.5	3.0
1974-4Q	4.8	2.4 2.2	3.1	2.9	3.8	2.4	3.7	3.5	5.9	2.2	2.5	2.2
1975-4Q	5.1	2.6 2.8	3.3	4.1	4.5	2.8	3.8	4.5	5.6	2.6	2.8	3.7
1976-4Q	5.0	1.4 2.5	3.0	3.3	5.1	2.3	3.1	3.9	5.0	1.7	2.8	2.8
1977-4Q	5.3	3.4	3.1	3.2	5.4	4.0	3.1	3.4	5.2	2.6	3.1	3.0
1978-4Q	5.6	3.2	4.0	3.3	5.6	3.8	4.3	3.9	5.6	2.4	3.7	2.7
1979-4Q	5.3	2.7	2.9	3.0	4.6	3.2	3.5	3.5	6.0	2.1	2.3	2.5
1980-4Q	4.8	2.1	2.6	3.1	4.5	2.3	3.4	3.7	5.2	1.8	1.8	2.6
1981-2Q P	5.5	3.6	3.7	3.3	5.0	4.2	4.7	3.9	5.9	2.9	2.8	2.6

*Before 1976 for asset sizes of (1) under 1 M and (2) 1 to 5 M separately.

P—Preliminary

Source: Quarterly Financial Reports, FTC, various issues.

TABLE 3.5—After Tax Rates of Return of Stockholders' Equity for Manufacturing Corporations, 1970–1981 *

4th Quarter of the Year	All Manufacturing				Durable Goods				Non-Durable Goods			
	All Sizes	Asset Under 5 M**	Asset 5–10 M	Asset 10–25 M	All Sizes	Asset Under 5 M	Asset 5–10 M	Asset 10–25 M	All Sizes	Asset Under 5 M	Asset 5–10 M	Asset 10–25 M
1970–4Q	8.7	0.4 6.9	6.8	6.7	7.1	3.6	5.9	6.3	10.3	4.5	8.0	7.2
1971–4Q	9.8	5.6 8.6	10.6	7.5	9.3	5.5	9.0	6.7	10.2	9.3	12.4	8.4
1972–4Q	11.5	13.3 11.1	11.5	9.7	11.6	10.6	11.1	9.3	11.4	13.9	12.1	10.2
1973–4Q	14.3	14.2 16.8	12.6	12.6	13.3	15.6	12.9	12.6	15.3	15.9	12.1	12.6
1974–4Q	13.2	13.7 10.8	12.3	9.9	10.4	11.0	12.6	10.4	15.8	13.3	11.9	9.4
1975–4Q	13.1	14.1 13.4	13.0	14.4	11.6	11.6	12.5	13.9	14.5	16.8	13.5	15.2
1976–4Q	13.1	8.3 12.1	12.7	11.8	13.4	10.6	11.4	11.8	12.9	10.3	14.2	11.7
1977–4Q	14.4	18.5	13.9	12.4	15.1	20.0	11.6	11.4	13.7	16.3	16.6	13.9
1978–4Q	16.1	18.2	18.1	13.6	16.9	19.7	16.9	14.3	15.3	15.8	19.6	12.8
1979–4Q	15.7	15.7	12.8	13.2	13.4	16.6	13.7	13.7	17.9	14.2	11.5	12.5
1980–4Q	14.1	11.1	11.2	13.1	12.7	10.6	11.8	13.3	15.4	12.0	10.3	12.9
1981–2Q P	16.1	19.6	16.9	13.3	14.6	20.0	17.2	13.3	17.4	18.9	16.4	12.9

* Annual Rates.

** Before 1976 for asset sizes of (1) under 1 M and (2) 1 to 5 M separately.

P—Preliminary

Source: Quarterly Financial Reports, FTC, various issues.

The rising trend for the after-tax rate of return on stockholder's equity for all manufacturing corporations is more substantial, increasing from 9 or 10 percent to 15 or 16 percent before dropping back to 14 percent. This increase in return on equity reflects the need for a higher return on equity in response to the rising inflationary rate and rising interest rates experienced during the 1970's. A similar trend is observed for the rates of return on equity for small manufacturing corporations.

The following comparisons are also observed, in general, between large and small firms on return on sales and return on equity: (a) profits per dollar of sales are lower for smaller manufacturers than for larger ones, (b) returns on equity are higher for small manufacturers; (c) there is no great disparity observed in the trends for the rates of return for small versus large manufacturers during the 1970's; and (d) there is a strong indication, as observed in Chapter II, that the rates of return for small firms fluctuate more widely than those for larger manufacturers. Thus, small manufacturing corporations have been able to maintain their position relative to larger ones. This has been possible because small firms have accepted a rising debt-equity ratio as illustrated in Table 3.6. This has allowed a rise in return on shareholder's equity. The increased leverage, however, makes smaller firms more susceptible to the disruptive impact of high interest rates on their cash-flow position.

Rising inflation, increasing deficits, lower savings rates, and a tax structure favoring borrowing for housing investments, have resulted in an environment that is unfavorable to business financing in general and small business financing in particular. The increased competition for available funds from the household and the Government sectors is depicted in Table 3.7. It is evident that the share of business borrowing in the credit market declined during the 1970's. The impact on small business is even more severe now during a high interest rate period.

To conclude, high inflation and high interest rates that incorporate anticipations of further inflation have caused real hardships for many small businesses. Many of these businesses have seen their financial position deteriorate because of their need for increased borrowing. The degree of hardship has been increased as interest rates have become even higher. The combination of increased borrowing occasioned by inflation, coupled with high interest rates, has raised the burden of debt for many small businesses, leaving them vulnerable to bankruptcy if cash flows drop significantly.

TABLE 3.6—*Debt-Equity Ratios for Small and Large Manufacturing Corporations by Industry, 1957-1980*

4th QT of the year	Durable Goods		Non-Durable Goods	
	Asset Under 5M	Asset Over 5M	Asset Under 5M	Asset Over 5M
1959	.65	.56	.76	.43
1960	.64	.56	.81	.44
1961	.70	.57	.87	.45
1962	.73	.59	.85	.47
1963	.78	.60	.87	.48
1964	.81	.67	.85	.50
1965	.85	.67	.90	.56
1966	.85	.74	.91	.61
1967	.79	.77	.91	.64
1968	.78	.83	1.00	.70
1969	.86	.90	1.01	.73
1970	.84	.94	1.03	.76
1971	.90	.94	1.08	.77
1972	1.03	.94	1.15	.78
1973	1.05	.99	1.13	.82
1974	1.06	.94	1.14	.79
1975	1.00	.91	1.20	.78
1976	1.08	.89	1.12	.82
1977	1.15	.80	1.19	.82
1978	1.21	.96	1.26	.93
1979	1.22	1.02	1.29	.93
1980	1.14	1.07	1.32	.94

Source: Computed from *Quarterly Financial Reports*, FTC, various issues.

However, the financial situation for small business is not completely negative. The Economic Recovery Tax Act of 1981 (ERTA) should provide relief through several tax provisions designed to improve cash flow for many small businesses. The ERTA also contains significant provisions which provide improved incentives for both savings and investment. Improvements in the savings and investment situation will help provide a more stable base for small business growth over time. The provisions of the ERTA are analyzed in Appendix D.

SECTION II. ECONOMIC RECOVERY PROGRAM AND A TIME FOR READJUSTMENT

Much of the economic policy of the past 15 years has been short-term in nature. An easy money policy has often been resorted to whenever an unemployment rate caused by a business slowdown

TABLE 3 7—Funds Raised in U.S. Credit Markets
(in billion dollars)

Selected Categories	1967	1968	1972	1973	1975	1976	1977	1978	1979	1980
Government										
Federal	13.0 (15.9)	13.6 (13.8)	15.1 (9.0)	8.3 (4.2)	85.4 (43.1)	69.0 (26.4)	56.8 (16.8)	53.7 (13.6)	37.4 (9.6)	79.2 (22.4)
State and Local	7.9 (9.7)	9.8 (9.9)	14.5 (8.7)	13.2 (6.7)	13.7 (6.9)	15.2 (5.8)	20.4 (6.0)	23.6 (6.0)	15.5 (4.0)	23.5 (6.7)
Business	(42.3)	(40.5)	(39.9)	(44.7)	(19.5)	(25.1)	(31.1)	(31.8)	(39.1)	(34.5)
Farm	3.3 (4.0)	2.8 (2.8)	5.8 (3.5)	4.5 (4.9)	8.9 (4.4)	10.9 (4.1)	14.7 (4.4)	18.1 (4.5)	25.8 (6.6)	17.8 (5.0)
Nonfarm, Noncorporate	4.9 (6.0)	5.2 (5.3)	14.1 (8.4)	12.9 (6.6)	2.0 (1.0)	4.7 (1.8)	12.9 (3.8)	15.4 (3.9)	15.9 (4.1)	12.9 (3.6)
Corporate Debt	27.3 (33.4)	32.0 (32.4)	46.8 (28.0)	65.2 (33.2)	28.0 (14.1)	50.1 (19.2)	77.1 (22.9)	92.2 (23.4)	110.9 (28.4)	91.8 (25.9)
Households	21.3 (26.1)	32.8 (33.2)	65.1 (38.9)	80.1 (40.8)	49.7 (25.1)	90.5 (34.7)	139.9 (41.7)	162.6 (40.8)	164.9 (42.2)	101.2 (28.6)
Total Funds Raised, Excluding Equity	81.7	98.8	167.2	196.1	198.0	261.0	335.3	398.3	390.6	353.9

(1) Figures in parentheses are the percentage of total funds raised.

Source: *Flow of Funds Account*, various issues. Federal Reserve Board.

became politically unacceptable. These short-term policies made the achievement of long-term goals difficult to attain. A fundamental change in economic policy was needed, one that would redirect the emphasis from short-term to long-term policy aimed at stability and growth. The Administration's economic policy addresses these needs. Two of the major components of this policy redirection are a deceleration in monetary growth and a tax cut. The initiation of these two policy changes has created a period of economic readjustment for many sectors of the economy, especially the small business sector.

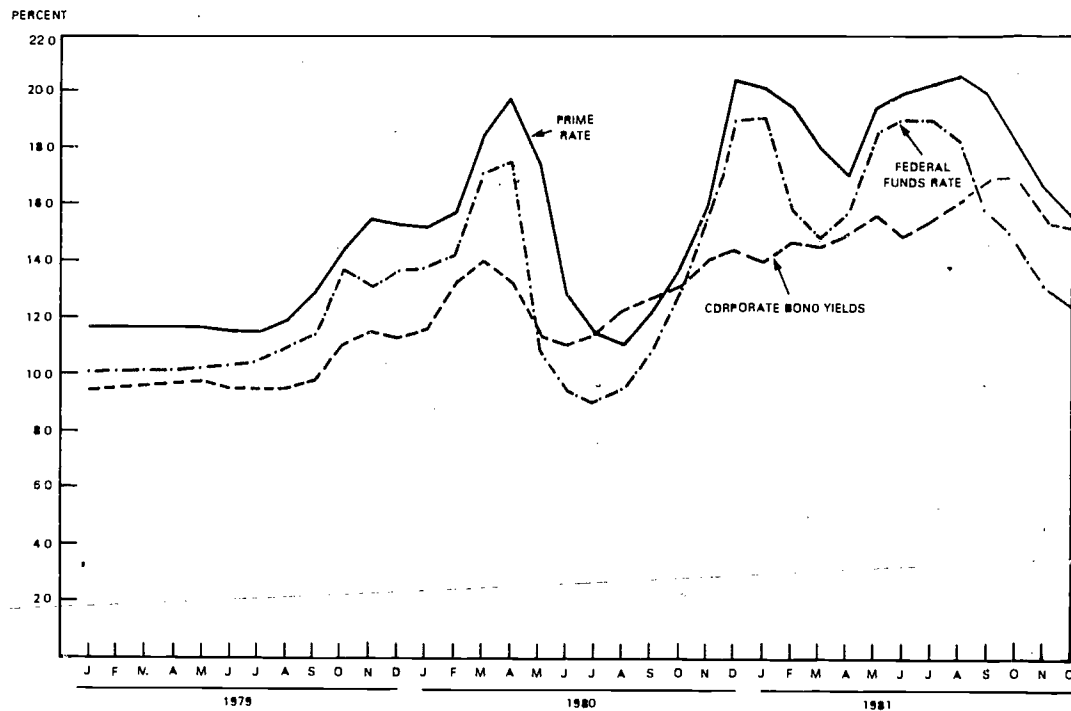
*Recent Financial Developments Affecting the Small Business Sector:
1979-81*

Developments in financial markets during the past two years have been disruptive to the financial operation of small businesses. The prime rate has stayed above 15 percent since October 1979, with the exception of a short period of decline from May to September 1980. Chart 1 depicts the developments in long-term and short-term rates in the open market. The high levels and the volatile fluctuations in these rates are unprecedented. The result is that long-term business investments have become unacceptably risky and expensive. Many investors would prefer a short-term investment in money market funds that yields a 15 percent return than a risky long-term investment venture involving acquisition of plants and equipment.

Interest rates are high or low only in reference to other prices and costs of production. While it is possible for small firms to prosper in a business climate with 15 to 20 percent increases in inflation, sales, and interest rates, it is impossible for these firms to survive such rates in a sluggish business environment. Since 1980, the real interest rate, defined as the difference between the nominal rate and the rate of inflation, has soared. The real cost of holding inventories and acquiring equipment has mounted substantially during the first nine months of 1981. Long-term rates were almost 5 percent over the rate of inflation and short-term rates were double this difference during this period. It is encouraging to observe that short-term rates have declined substantially since September 1981.

Interest rates paid by small businesses differ according to the type of lender. Normally, a small business owner pays 2 to 3 percent above the prime rate (the rate charged to larger corporate borrowers with very strong credit ratings) for a short-term bank loan

CHART I
TRENDS IN THE PRIME INTEREST RATE, FEDERAL FUNDS RATE, AND CORPORATE BONDS YIELDS
JANUARY 1979 - DECEMBER 1981



SOURCE BUSINESS CONDITIONS DIGEST

and 3 to 6 percent plus prime for a loan from a finance company. Costs of borrowing from other sources go even higher. Very little information is available on what small business owners are paying for borrowing from various sources. Limited information is available on the cost of funds from commercial banks to small businesses. Some data are collected and published by the Federal Reserve Board in the *Survey of Terms of Bank Lending*.⁴ Information on rates charged by banks for loans of different sizes has been available since 1977. Although the business receipts of the borrower are not known, the assumption is made that most smaller size loans are made to smaller businesses.⁵ Table 3.8 provides a comparison of the rates charged by banks on short-term commercial and industrial loans from August 1980 to August 1981. While all rates have increased during this period, the increase in rates for small loans and in rates charged by small banks has been much smaller. In fact, a spread of about 2 percent for small loans over large loans during 1980 has disappeared during 1981. Apparently, the cost of funds for small banks has not risen as fast as for large banks.⁶ With limited funds available, many less qualified borrowers have been excluded from bank loan portfolios.

TABLE 3.8—*Weighted Average Bank Lending Rates for Short-Term Commercial and Industrial Loans, August 1980–August 1981*

Loan Size (\$1,000)	All Banks					Small Banks				
	8–80	11–80	2–81	5–81	8–81	8–80	11–80	2–81	5–81	8–81
1–24	13.66	15.97	19.59	19.45	20.76	13.71	15.91	19.38	19.34	20.59
25–50	13.53	15.72	19.53	19.87	21.18	13.62	15.60	19.19	19.71	20.96
51–99	13.00	16.39	19.77	19.10	21.36	13.07	16.37	19.51	18.81	21.12
100–499	12.49	15.52	20.18	19.93	21.37	12.56	15.29	19.88	19.79	21.05
500–999	12.01	15.87	20.87	19.58	21.85	12.11	15.75	20.94	19.28	21.96
Over 1 M	10.92	15.68	19.83	20.14	21.06	11.38	15.54	20.27	19.45	21.21

Source: Federal Reserve, *Statistical Release E.2*.

⁴Statistical Release E.2, Federal Reserve Board. This survey represents a better coverage of all small banks than the previous surveys.

⁵Martha S. Scanlon, "Relationship Between Commercial Bank Loan Size and Size of Business". Federal Reserve Board, Division of Research and Statistics. This report was prepared for SBA and the Interagency Credit Study Committee.

⁶With the increasing competition for depository funds from non-depository institutions, especially money market mutual funds, and the lifting of rate ceilings

Another factor to consider in explaining this situation is that a greater number of larger loans are now being made under the variable rate arrangement. Rates for these loans are higher than the fixed-rate term loans used during a period exhibiting an inverted yield curve, a period when short-term money rates are higher than longer-term rates. For example, during August 1981 over 80 percent of term loans made by large banks for loans of \$500,000 and over were for floating rate loans, while only 27 percent of loans made by small banks for loans of under \$100,000 were made under this arrangement. However, the floating rate loan arrangement has also become more widely used by bankers for small business loans in order to minimize the risk from unexpected changes in interest rates.

Monetary Policy and the Availability of Financing to Small Business

The deceleration of monetary growth reduces the availability of credit. The slow growth in the money supply during 1981 becomes even more pronounced when it is viewed in terms of the amount of "real money" supplied to the economy. "Real money" is defined as the money stock divided by the level of prices. During the first nine months of 1981, the compounded annual rate of growth for two measures of the money supply, M1-B and M2,⁷ were 4.5 percent and 9.6 percent, respectively, while the rate for the implicit price deflator was at 9 percent. Consequently, there has been no real growth in monetary aggregates during this period.

In addition to the problems experienced because of the decline in the overall supply of funds, small businesses encounter other difficulties in obtaining financing during a tight money period. They cannot compete with large businesses for banking funds, the most important source of financing to small business. Statistics have shown that during tight money periods large businesses move

by the Depository Institution Deregulation Committee, the situation is changing. It is possible that small banks may not be able to continue their traditional role as the primary source of funds to small firms in small communities, but recent evidence on trucking and airline deregulation shows that the needs of these entities are met through competitive responses to changing markets.

⁷M1-B is defined to include public holdings of (a) demand deposits, (b) currency, (c) traveler's checks, and (d) negotiable orders of withdrawal and automatic transfer service accounts at all depository institutions. M2 is defined as M1-B plus savings and small-denomination time deposits at all depository institutions, money market fund shares and overnight repurchases.

into short-term markets because they defer the issuance of corporate bonds in the bond market. Consequently, small businesses are less able to compete in the bank loan market during tight money periods. This situation is depicted in Table 3.9.

Although the *Survey of Terms of Bank Lending* issued by the Federal Reserve Board was not designed to provide an estimate for the volume of bank loans, it does provide an approximate picture of changes in the loans extended by banks to large versus small businesses. It is clear that the small business share of total loans approved has dropped substantially during 1981. There is a "crowding out" of small business as banks choose to meet the large loan demands of larger firms. In addition, a voluntary decrease in loan requests by small business has occurred as small business owners respond to high interest rates.

The impact of monetary policy on the availability of equity capital to small business is harder to discern. Although the stock market suffered a setback in 1981, the venture capital markets have

TABLE 3.9—*Short-Term Bank Loans by Loan Size, Dollar Amount, and Percent of Total*
(in million dollars)

	Small Size Loans (thousands of dollars)				Large Size Loans (thousands of dollars)		Total (100 Per- cent) Dollars
	Under \$50		\$50 to \$500		Over \$500		
	Dollars	Percent	Dollars	Percent	Dollars	Percent	
November, 1978	1228	12.9	2464	25.8	5842	61.3	9534
February, 1979	1336	15.5	2155	31.5	3359	49.0	6850
May, 1979	1587	18.5	2016	23.5	4973	58.0	8576
August, 1979	1403	16.9	1864	22.5	5028	60.6	8295
November, 1979	1066	13.1	2156	26.6	4885	60.3	8107
February, 1980	1254	12.6	2236	22.5	6430	64.9	9920
May, 1980	1404	12.4	2756	24.4	7057	62.3	11317
August, 1980	1195	8.9	2782	20.6	9498	70.5	13475
November, 1980	1278	9.8	2382	18.2	9440	72.1	13101
February, 1981	1339	7.9	3419	20.1	12227	72.0	16986
May, 1981	1335	8.0	2886	17.2	12619	74.9	16841
August, 1981	1468	5.8	3428	13.9	20343*	82.7	24597

* Due to a loan take-down by Du Pont for the take-over of Conoco.

Source: Federal Reserve Board, *Statistical Release E.2*.

held up fairly well. Data on the availability of equity capital to small businesses are difficult to obtain. All indications are that the equity markets for established small businesses and for new ventures recovered from the slump of the early 1970's and performed very well during 1979 and 1980. Table 3.10 provides an illustration of this recovery.

Moreover, recent efforts by the Securities and Exchange Commission (SEC) to simplify registration requirements also benefited small borrowers in the equity market. The maximum amount on a Regulation A offering was raised from \$500,000 to \$1,500,000 in September 1978. Form S-18, a simplified registration form for initial public offerings of up to \$5 million, was adopted in April 1979. For the first nine months of 1981 the total amount offered under Form S-18 was \$441 million. In addition to the above, the SEC has recently published additional suggested changes in regulations which could further open up equity markets to small business.

Monetary Policy, Recession, and Small Business

Since approximately 80 percent of small businesses rely on financing from depository institutions, an increase in the cost of financing and a decrease in the availability of funds from these institutions has a more severe impact on smaller firms than on larger firms. Small firms experience the impact sooner and for a longer duration. Further, small firms tend to have higher debt-equity ratios and have a greater dependence on current debt, as illustrated by Tables 3.11 and 3.12. The shorter maturity of the debt structure for small businesses makes these firms more vulnerable to sharply rising interest rates. Their interest costs increase in response to rapidly increasing short-term rates. Moreover, failure to obtain loan renewals results in an immediate liquidity crisis for these firms.

Rising interest cost burdens in an economy of sluggish sales and a decline in the inflationary rate spell disaster to the cash flow position of a small firm. Although cash flow will eventually improve when inventories and receivables adjust to the lower level of sales, the persistence of high interest rates during the past year and a half has increased pressure on the liquidity position of many small firms. Small businesses have suffered larger declines in sales and profits, particularly during recessions, experience greater cash-flow problems, and must close their doors or declare bankruptcy when these acute profit and cash-flow problems are not alleviated by financing from banks or suppliers.

TABLE 3.10—Common Stock Offerings of Publicly Held Corporations and IPO Issuers, 1972–1980
(dollars in millions)

Year	Publicly Held Corporations	IPS's		High Technology Issuer IPO's			
	Dollar Volume	Number of Issues	Dollar Volume	Total Number of High Technology Issues	Average Offering Size	Total Dollar Volume	Small Issues ¹
1972	\$10,707	499	\$2,070	91	2.1	\$189.2	\$256.0
1973	7,643	90	299	23	2.2	50.1	154.0
1974	3,976	16	65	3	1.6	4.7	78.0
1975	7,413	10	58	—	—	—	49.0
1976	8,305	22	131	7	6.0	42.3	45.0
1977	8,047	36	144	10	6.5	65.2	46.0
1978	7,937	47	196	21	3.6	76.3	61.0
1979	8,709	86	536	16	5.1	82.1	181.0 (42.3)*
1980	18,881	227	1,472	60	7.2	431.3	219.0 (238.4)*
Totals	\$70,573	1,033	\$4,971	231	4.1	\$941.2	

Sources: IPO Registration Statements; Form 10-K; Form SR; SEC *Monthly Statistical Review*; Directorate of Economic and Policy Analysis, Securities and Exchange Commission.

¹Value of Regulation A Filings. Since September 1978, the Regulation A offering amount ceiling was raised to \$1.5 million.

*Figures in parentheses are for issues under Form S-18 initiated by SEC since April 1979. For the first nine months of 1981 the total amount offered was \$441 million.

TABLE 3.11—*Debt-Equity Ratios for Selected Industries for Profit and Loss Corporations, 1976*

Asset Classes (thousands)	Under \$25	\$25— \$50	\$50— \$100	\$100— \$250	\$250— \$500	\$500— \$1000	\$1000— \$2500	\$2500— \$10000	\$10000— \$25000	\$25000— \$100000	Over \$100000
Manufacturing	-59.14	1.66	1.53	.99	.76	.69	.62	.53	.47	.50	.57
Services	3.08	1.01	1.21	1.14	1.30	1.91	2.33	2.28	1.42	1.31	1.22
Construction	-5.53	2.47	1.95	1.22	1.19	1.35	1.30	1.42	1.53	1.12	.78
Transportation	3.00	1.70	1.65	1.49	1.24	1.29	1.44	1.29	1.06	1.20	1.00
Wholesale and Retail Trade	8.95	1.59	1.05	.94	.89	.99	.98	.98	.88	.78	.75

Source: Department of the Treasury, Office of Tax Analysis.

TABLE 3.12—*Current Debt as the Percentage of Total Assets, Manufacturing Corporations, 1975–1979.*

Period	Asset Size							
	Under 5M	5–10M	10–25M	25–50M	50–100M	100–250M	250–1 B	1 Billion +
1–75–1–76	34.8	31.1	29.6	27.5	24.7	24.6	22.5	20.2
2–76–2–77	35.8	33.9	29.7	26.4	25.0	24.0	22.6	20.7
3–77–3–78	36.6	34.7	32.0	28.3	26.0	24.3	22.7	21.9
3–78–3–79	37.5	35.8	33.4	30.0	28.1	25.5	24.2	23.9

Source: FTC *Quarterly Financial Reports*, various issues.

Note: Current Debts are debts with maturity of under 1 year.

The plight of small business during periods of recession is best gauged by the flow of business formations and business discontinuances. However, only partial data are available on these flows which are discussed extensively in Chapter II. Detailed comprehensive time series data on business formation and dissolution are not available for a definitive study of the impact of monetary policy on small business. Additionally, recent changes in the bankruptcy law make it even more difficult to interpret the data supplied by various sources. Despite these difficulties, it has been estimated that business failures have increased by about 30 percent between 1980 and 1981.

High interest rates became a major concern to small business owners during 1981 when interest rates persisted at high levels and the economy reversed its course of recovery. In the National Federation of Independent Business quarterly survey for July 1981, high interest rates was the single most important problem reported by small, independent businesses.⁸ Thirty-one percent of the respondents cited high interest rates as their single most important problem during the second quarter of 1981 as compared with only 15 to 20 percent during previous quarters.

Small businesses suffer great fluctuations in their sales and profits during a recession, thus bearing a significant share of the burden of the economic readjustment in the economy. The Federal Trade Commission statistical series provides a time series depicting

⁸ Quarterly Economic Report for Small Business, National Federation of Independent Business, July 1981, Table 1, p. 5.

how small businesses are buffeted during a business recession. Table 3.13 reveals that the rates of return on equity in most instances for small manufacturers decline twice as much as the rates of return for large firms during a recession. Charts II and III show clearly how the profit rates for small manufacturers suffered during the slump of 1980.

TABLE 3.13—*Changes in Rates of Before-Tax Profit on Stockholders' Equity for Manufacturing Corporations During Business Recession*

Recession of	Under 1 M	1 to 5 M	5 to 10 M	250 M to 1 Billion	All Sizes
1960–61					
High	21.2%	17.7%	21.1%	23.2%	23.1%
Low	5.0%	7.5%	9.8%	14.5%	12.6%
Changes from High to Low	–76%	–58%	–54%	–38%	–45%
1969–70					
High	28.0%	24.4%	22.6%	22.2%	21.9%
Low	5.9%	12.9%	13.4%	16.2%	13.8%
Changes from High to low	–79%	–47%	–41%	–27%	–37%
1974–75					
High	40.9%	34.5%	29.0%	27.0%	26.5%
Low	16.1%	15.1%	17.3%	16.3%	15.0%
Changes from High to low	–61%	–56%	–40%	–40%	–43%
1980					
High	35.3%		32.5%	28.5%	28.8%
Low (?)	20.2%		21.1%	19.6%	19.8%
Changes from High to Low	–43%		–35%	–31%	–31%

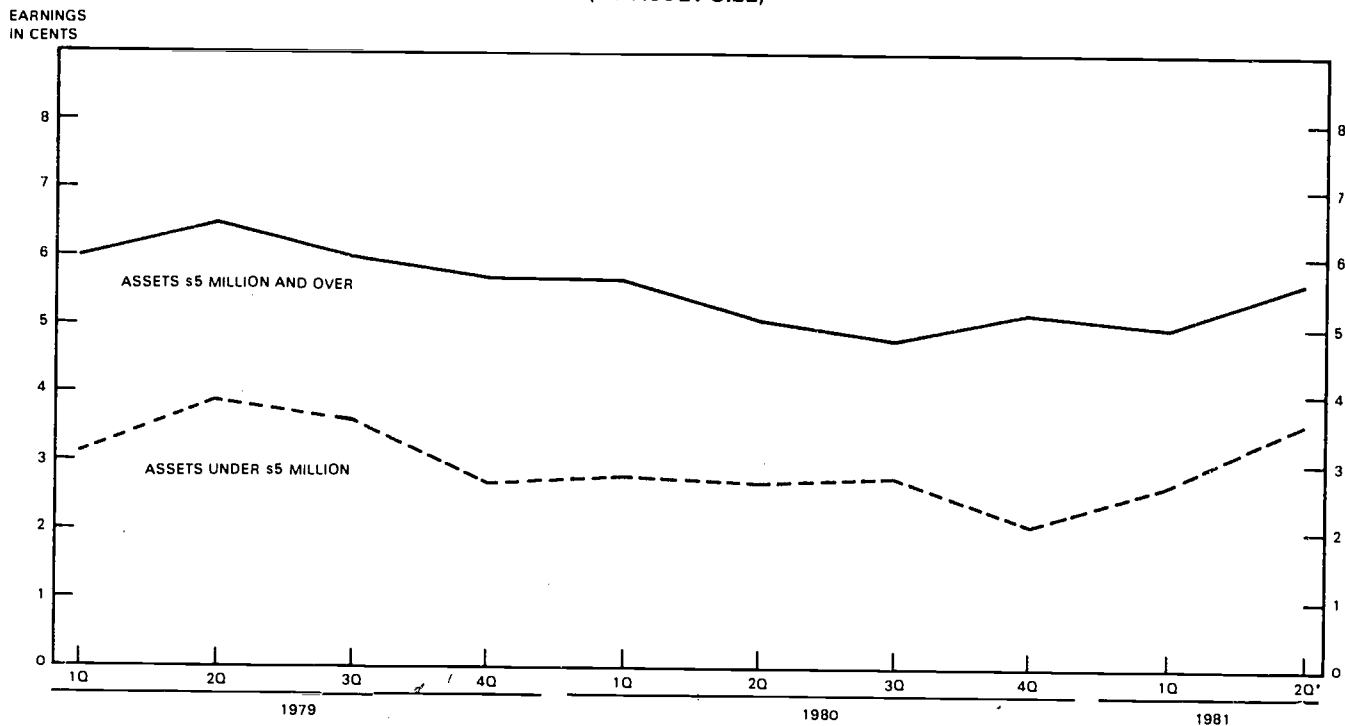
Source: Computed from FTC *Quarterly Financial Reports*, various issues

SECTION III. ECONOMIC PROSPECTS: A CHANGING FINANCIAL ENVIRONMENT FOR SMALL BUSINESS

The extension of credit to small business has generally been a uniquely local phenomenon. New small businesses established a relationship with a local bank, and, over time, borrowed from the bank as necessary to finance business expansion. Credit decisions were based on extensive knowledge on the part of both parties.

The local approach to small business banking may be changing. Over the past several years there has been a significant drive to

CHART II
AFTER-TAX EARNINGS PER DOLLAR OF SALES
FOR MANUFACTURING CORPORATIONS
(BY ASSET SIZE)

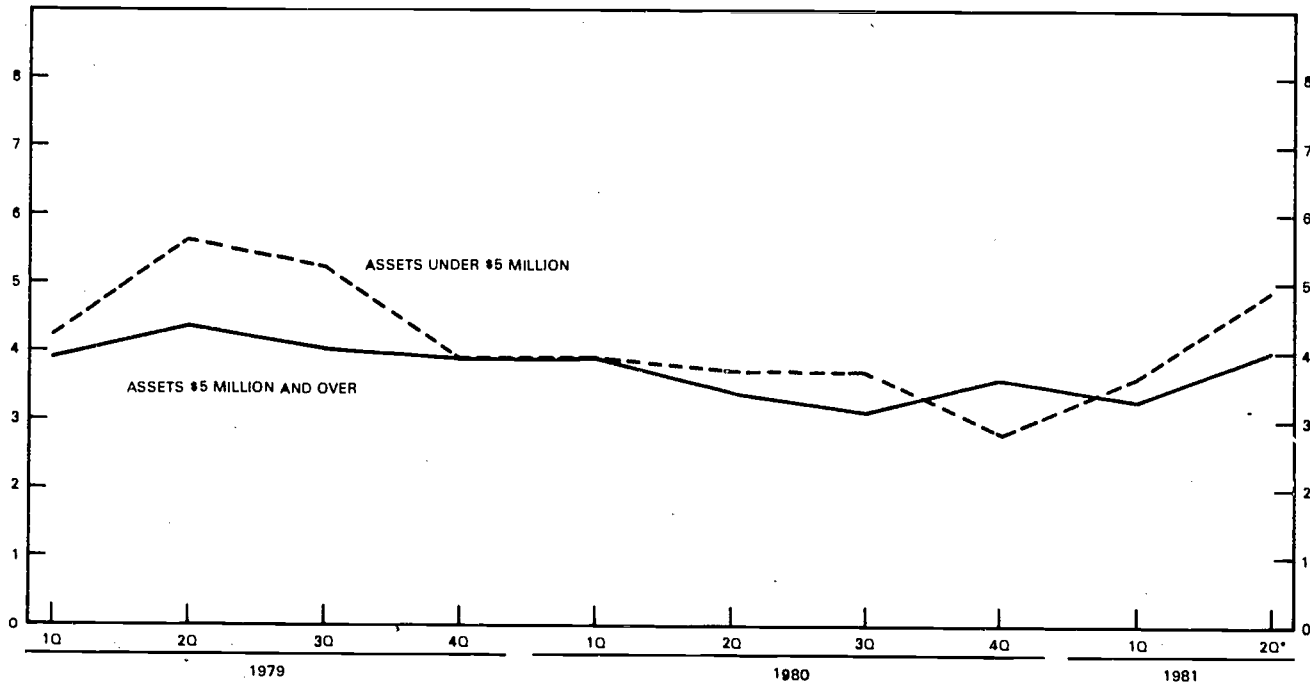


SOURCE FEDERAL TRADE COMMISSION: QUARTERLY FINANCIAL REPORT FOR MANUFACTURING, MINING AND TRADE CORPORATIONS

*PRELIMINARY DATA

CHART III
AFTER-TAX QUARTERLY RATES OF PROFIT ON STOCKHOLDERS' EQUITY
FOR MANUFACTURING CORPORATIONS
(BY ASSET SIZE)

EARNINGS
IN CENTS



SOURCE FEDERAL TRADE COMMISSION, QUARTERLY FINANCIAL REPORT FOR MANUFACTURING, MINING AND TRADE CORPORATIONS

*PRELIMINARY DATA

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deregulate the financial industry and to increase competition across all types of financial markets. A number of significant changes have already occurred, including the introduction of Electronic Funds Transfer (EFT), basic changes in Federal Reserve Board banking policy, the deregulation of ceiling interest rates on bank deposits, and the introduction of new financial services such as NOW accounts and money market funds. The drive to deregulate financial institutions is demonstrated in the enactment of the Depository Institution Deregulation and Monetary Control Act of 1980. This Act, implemented through the Depository Institution Deregulation Committee, seeks to bring about more significant changes in the organization of American financial institutions in the near-term future. As a result, small businesses are concerned about the future configuration of financial markets and the ability of small business to borrow in those markets.

Major Developments in the Financial Service Industry

As one of the most heavily regulated industries, financial institutions have been operating in an elaborate framework of restrictions and protections under various State and Federal regulatory authorities. Market entry has been restricted, product lines limited, and the prices of services controlled. For example, depository institutions were provided free check clearing and wire transfer services from the Federal Reserve System, and deposit insurance from the Federal Depository Insurance Corporation. They were protected from competition through regulations which included controls on prices paid for depository funds. Securities dealers and investment firms were provided with distinct product lines and other activities which other financial institutions could not offer.

Developments in the financial market during the past decade have eroded the compartmentalization of financial industries. Many major bank holding companies are now engaged in such activities as leasing and insurance. The expansion of money market mutual funds makes the geographical restrictions on banking operations ineffective. The ability of major brokerage firms to offer cash management accounts reduces the importance of the depository institutions in the management of transaction accounts, that is, in accounts for payment purposes.

Efforts to deregulate the financial service industries are creating major structural changes. For depository institutions these developments include (a) eliminating the limitations on the maximum rates on interest and dividends which may be paid on

deposits/shares; (b) allowing all institutions to offer NOW accounts; (c) broadening the authority for all depository institutions to make loans and liabilities of different types; and, (d) allowing fee charges for the services provided by financial regulatory authorities. Furthermore, comprehensive legislation is being considered that would allow banks to establish branches in states other than their home state, e.g., interstate banking/branching.

It is difficult to conjecture about the impact of these developments on the survival of many small financial institutions. Many studies seem to indicate that a number of these small institutions would survive and prosper in a deregulated, competitive environment. Developments during the next two to three years should provide a better basis for analysis. The developments discussed above will likely result in an environment where (a) the distinction between banks, savings and loan associations, finance companies, and credit unions will be blurred; (b) a higher degree of integration in financial markets will occur, with segmented markets and differential interest rates disappearing; and (c) a number of very small banks and savings and loan associations will be eliminated. What is foreseen is a new environment where deposit funds will be collected by a large number of fairly good-sized financial institutions, such as large banks, mutual funds and stock brokerage firms. The funds will be channeled to small banks for loans to businesses and consumers in different localities. This will happen because, while there is a substantial economy of scale in collecting deposit funds, there seems to be only limited economies of scale in business lending, which requires intimate knowledge of local business persons, the community, and the business.

What is the prospect for small business financing in this environment? It is very likely that real interest rates, the rate discounted by the rate of inflation, will rise substantially for small borrowers in many small localities. While nominal interest rates may decline and stay low when the rate of inflation declines in response to the Administration's Economy Recovery Program, real costs of borrowing to some small borrowers will be higher because of the elimination of ceiling rates on deposits and the increased competition for deposits by all financial service industries. However, real interest rates are expected to decline as recently enacted savings incentives increase the supply of funds available for lending.

A large number of small businesses will have more funds available to them because of increased competition. Depository institutions will not suffer severe shortages of deposit funds caused by fi-

nancial disintermediation. Small banks will obtain funds for lending from various sources, such as large banks, large securities brokers, and large mutual funds. For very small business borrowers, the future is uncertain. The basic question is whether they will be able to bid successfully for higher-cost funds.

Variable Interest Rates and Small Business

A major development in the financial markets during the past several years has been the increasing use of a variable (or floating) rate arrangements by lenders. This has resulted because lenders/bankers are attempting to reduce their interest rate risk in view of rising interest rates and the continual uncertainty about future developments in interest rates. By either using a variable rate arrangement or by shortening the maturity of a loan, bankers became more willing to extend loans with a longer maturity and possibly at lower rates.

Borrowing through a variable rate arrangement means greater uncertainties to small businesses regarding the cost of funds. In fact, it become unpredictable because the cost will change with future changes in interest rates. The potential for severe pressure on the cash flow position of a small firm becomes great when monetary policy becomes effective in raising interest rates and reducing sales. Consequently, small business borrowers will need to provide adequate reserves in their cash-flow planning to meet these unexpected increases in interest payments. However, as long as uncertainties about future increases in interest rates persist, the variable rate arrangement will continue to be a primary type of loan arrangement. When interest rates become stabilized, the advantage of a variable rate arrangement over a fixed rate will disappear.

Financing a Budgetary Deficit in an Economy with a Stable Money Supply

The prospect of Federal budget deficits during the next two to three years has become a major concern to many small businesses. While a steadily decelerating money supply would prevent monetizing the deficit and should lower inflation and interest rates, the adjustment presents a potential difficulty for small business borrowers in the credit market. Although many successful small businesses will be able to retain more cash through various tax deferrals under the new tax incentive programs, most new businesses and businesses experiencing losses will be able to realize

only limited benefits from these provisions immediately (extended loss-carry-forward provisions should provide some assistance).

SECTION. IV—SUMMARY

Financial conditions for small businesses, as for other sectors in the economy, have deteriorated during the past 15 years of rising inflation and high interest rates. Small businesses have had to increase their borrowing to meet increased needs for operating capital. The increased leverage and debt burden, however, make small businesses vulnerable during periods of volatile interest rates.

During the last 15 years, but particularly during the recessions of 1974-75 and 1980-81, business failures increased substantially. Small businesses experienced declines in sales and profits and have experienced cash flow problems. The ability of small businesses to survive a deep recession has been considerably weakened by the increased leverage and heavy debt burden.

As competition increases in the financial service industry, small businesses should benefit through services from smaller financial institutions that concentrate in specialty lending to small businesses. Because more banks are using the variable rate loan arrangement, small business owners may experience better access to capital with less predictable interest charges. A fixed rate loan continues to provide a more desirable form of financing for many small businesses in periods of rising interest rates.

A changing financial market provides both new challenges and new opportunities to small business owners. They have to be more skillful in managing their cash flow and in utilizing their assets in view of the expected rise in the real cost of borrowing. The era of low real interest rates seems to be over. When the American economy resumes its growth under a policy of moderate and stable monetary growth, interest rates will decline. The economic readjustment of the 1980's demands greater ingenuity and persistence from small businesses.

CHAPTER IV

Effect of Federal Policy on Small Business

The Federal Government has an important role in providing a hospitable environment for small business. Touching nearly every aspect of business activity and opportunity, its actions are rarely neutral in their effect on small business. The availability of equity capital and credit is affected dramatically by Federal tax, securities, and banking policies. The ability of small businesses to utilize labor and capital and to produce goods and services is regulated extensively by an agglomeration of agencies, often with overlapping or conflicting mandates. Finally, the Federal Government's attitude toward the basic laws of competition—its antitrust policy—establishes a framework for small businesses to deal with suppliers, competitors, and customers. Chapter IV addresses the impact of Federal policy on small business, providing the overlay that helps explain the economic factors described in Chapter III.

More specifically, Section I discusses the access of small business to capital and credit sources and how this access is influenced by banking regulations, securities and tax laws, and venture capital policy.

Section II discusses general Government regulatory and regulatory reform policy and examines more closely the specific policies affecting small business.

Finally, Section III examines the competitive climate for small business and highlights specific small business concerns.

SECTION I. IMPACT OF FEDERAL POLICY ON THE AVAILABILITY OF CREDIT AND EQUITY CAPITAL

Credit Environment

The 1970's have been difficult for small businesses. Rising inflation, interacting with the tax structure, has resulted in an environment that is unfavorable to business financing in general, and small business financing in particular. The probable reordering of credit markets through deregulation promises new, profound changes in

the 1980's. The deregulation of financial institutions, which was begun in 1980, and the probable conglomeration of financial institutions and services are key credit issues.

Investment in business has declined relative to alternative opportunities because of a lower return on real capital investment. The increased competition for available funds from the household and the Government sectors is depicted in Table 3.7 in Chapter III. It is evident that the share of business borrowing in the credit market declined during the 1970's. This happened at a time when business demand for financing had increased because of rising inflation and declining internal financing.

Monetary Policy. Efforts to control the growth of the money supply and to even out swings in its rate of growth have been significant tools in the fight against inflation. Excessive money growth during the 1970's contributed to high inflation and high interest rates. These high rates have reflected both an increased inflation premium and also an increased risk premium to account for market uncertainty. With this increased volatility has come a shift to short-term markets. The situation has caused particular problems for small businesses that rely heavily on credit and tend to borrow relatively more than larger businesses. As the Fed allows increased amplitudes in interest rate fluctuations, small businesses have had difficulty adjusting to account for uncertainty. On the other hand, as money supply growth is predictable and interest rates steadier, small businesses can plan borrowing activity.

Impending Deregulatory Changes. The impact of impending deregulation on the flow of credit to small business is of concern to many parties interested in the state of the small business sector. Recent legislation, including the Depository Institutions Deregulation Act of 1980 and proposed reforms of the Glass-Steagall and McFadden Acts, will be the focus of activity in this area. The Glass-Steagall Act of 1934 prohibits banks from involvement in both commercial and investment banking activities, and the McFadden Act limits the geographic area in which a bank may operate.

If the banking industry is deregulated, many small business owners are concerned whether their financing needs will be met if small banks survive only as branches of larger banks. Small banks (assets less than \$100 million) and medium-sized banks (assets \$100 million up to \$1 billion) provide approximately 75 percent of the total dollar volume of bank credit to small business. Large banks

(assets greater than \$1 billion), which control more than one-half of total bank assets, provide only 25 percent of the dollars loaned to small business by banks.¹ Small business people are correct in their perception that most loans to small business are made by small and medium-sized banks. It is unclear, however, whether large banks are less responsive to the needs of small business because large banks are not as active in the current small business loan market.

The concerns expressed above should be carefully analyzed as the Depository Institutions Deregulation Committee (DIDC) and the Congress move toward a less-regulated financial environment. The DIDC and the Congress should also pay close attention to the competitive practices of large banks as the economy moves toward a less-regulated environment. Finally, it is important that the cost and availability of credit to small business be carefully monitored by the DIDC as deregulation proceeds. Small banks may not be able to adjust as fast as large banks, with a resulting negative effect on the availability of credit to small business.

While large banks are expected to expand statewide, regionwide, or even nationwide in this new deregulated environment, many small banks may also continue to prosper and to grow. Many small financial institutions should remain viable because of their ability to meet the financial needs of small business in various locales. Small banks will also provide many of the ancillary financial services demanded by private individuals and business owners at reasonable cost because there are few scale economies in providing these services.

The prospect of increasing large bank lending to small business through increased competition should be encouraging to small business. However, it is important for the Federal financial regulatory authorities to monitor competitive practices closely in this new environment. As the financial industry becomes deregulated and the credit markets integrated, the availability of credit and the cost of funds to some sectors and in some localities will be unfavorably affected. It is likely that some very small and new businesses in some remote localities will not obtain needed funds or will

¹ Unpublished data from Federal Reserve Board Survey of Commercial Bank Lending to Small Business.

only get them at greatly increased cost, reflecting the economic realities in the market.

Federal Credit Assistance Environment. Because small business growth and development is usually financed through loans, the Congress has created several programs that focus on involvement by the Federal Government in lending activities as a means of assisting small business. Whether these programs are effective is uncertain. However, it is important to review the total context of Federal lending assistance to all firms and review the levels of activity in the programs targeted to smaller firms.

It is difficult to draw concrete conclusions about the impact of Federal involvement on the credit markets or on small business. It is possible, however, to document the general record of that involvement. Over the past 25 years, both total Federal participation in the credit markets and Federal direct and guaranteed financial assistance to all business have increased steadily. (See Table 4.1.) However, Federal direct and guaranteed financial assistance to small business, which increased steadily through the mid-1970's, has clearly leveled off in recent years.

The U.S. Government enters the credit market directly through Treasury borrowing, and indirectly through guaranteed lending sponsored by such agencies as the Federal National Mortgage Association and the Small Business Administration (SBA). The broad trend of increasing Federal activity, both in absolute dollar terms and as a proportion of total lending, is clear. The Federal Government now accounts for or induces the lending of about one out of every four dollars raised in the entire borrowing market.

Federal aid to businesses and nonprofit entities is provided through approximately 40 Government programs. In addition to several billion dollars in grants and other unrepayable aid, the Federal Government provided credit assistance to businesses and nonprofit entities through \$6.0 billion in direct lending and \$6.4 billion in loan guarantees during the 1980 fiscal year.

The recipients of this assistance include the largest corporations, such as Chrysler and Boeing Aircraft, individuals, proprietorships, foreign governments, and U.S. Government corporations.

The level of Federal participation in business sector credit markets is depicted in Table 4.2. Funds advanced under Federal auspices for assistance to business and non-profit entities increased from an average annual rate of \$0.5 billion from 1955-59 to \$5.5 billion from 1975-79. In 1980, net funds advanced under Federal auspices for these purposes increased to \$12.4 billion.

TABLE 4.1—Measures of Federal Participation in Credit Markets, FY 1956–FY 1980
(5-year averages)

Fiscal Years	Treasury Borrowing as Percent of Funds Raised by Nonfinancial Sectors (1)	Treasury plus Sponsored Agency Borrowing as a Percent of Total Funds Raised ¹ (2)	Treasury plus Sponsored Agency Borrowing plus Borrowing for Loan Guarantees as a Percent of Total Funds Raised ¹ (3)
1956–1960	3.9	6.1	16.4
1961–1965	8.4	9.1	16.9
1966–1970	5.3	8.7	14.9
1971–1975	13.3	15.8	22.7
1976–1980	18.8	20.0	25.3

¹ Total funds raised include borrowing by financial and nonfinancial sectors.

Sources: Federal Reserve Board Data on Treasury borrowing, Sponsored Agency borrowing, funds raised in credit markets by nonfinancial sectors and total funds raised in credit markets are derived from Flow of Funds Accounts, Board of Governors of the Federal Reserve System. Data on borrowing for primary guaranteed loans are derived from *Budget of the United States Government*, Special Analyses on Federal Credit Programs.

TABLE 4.2—*Federal Participation in Business Sector Credit Markets*¹

(Fiscal Years; in billions of dollars)

	5-year Averages					Actual 1980
	1955- 1959	1960- 1964	1965- 1969	1970- 1974	1975- 1979	
Funds raised by private nonfarm, non-financial business sector ²	12.7	15.1	32.1	63.3	100.5	120.5
Federal credit assistance to businesses and nonprofit entities:						
Direct loans (net) ³	0.5	1.0	1.0	1.7	3.2	6.0
Guaranteed loans (net) ³	*	0.6	0.6	2.0	2.3	6.4
Total funds advanced under Federal agencies	0.5	1.6	1.6	3.7	5.6	12.4
Federal participation rate	4%	11%	5%	6%	6%	10%
<i>Memorandum:</i>						
Share of federally related credit activity	n.a.	22%	15%	17%	10%	15%

¹ Excludes amount for callable capital subscriptions to international financial institutions.² Excludes residential multi-family mortgages.³ Guaranteed loans held as direct loans by the FFB are included under direct loans and excluded from guaranteed loans.

* \$50 million or less.

n.a. Not available.

Source: Office of Management and Budget

Until 1980, the share of Federally-sponsored credit activity devoted to business and nonprofit entities (See Table 4.2) had been declining, from an average of 22 percent during 1960-64 to an average of 10 percent during 1975-79. In 1980, the share increased to 15 percent.

As shown in Table 4.3, despite the decline in relation to other Federal credit activity, credit assistance to business and other nonprofit entities has been growing at a substantial rate. Throughout the 1955-1980 period, such credit assistance grew at an average annual rate of 9.5 percent, while prices (as measured by the GNP deflator) increased at less than 4.5 percent per year. Loans and loan guarantees outstanding increased tenfold, from \$9.1 billion in 1955 to \$89.4 billion in 1980.

Federal credit assistance generally has been growing, as has that part of the total going to business. Federal credit assistance to small

TABLE 4.3—*Loans and Loan Guarantees Outstanding at End of Period*
(dollar amounts in billions)

	1954-- 1959	1959-- 1964	1964-- 1969	1969-- 1974	1974-- 1979	1979-- 1980
Military assistance	0.5	0.1	0.4	1.8	10.1	12.3
Economic assistance	3.1	7.5	8.2	11.3	12.6	12.5
Economic and community development ..	0.4	1.7	3.7	5.4	3.0	2.8
Transportation	0.4	0.6	0.7	3.0	11.4	13.0
Small business assistance	0.4	1.0	2.1	6.9	15.1	16.2
Export promotion	3.5	4.6	7.5	11.5	18.6	21.2
Energy	—	—	—	—	*	0.9
Other	3.5	4.3	5.7	6.8	9.6	10.6
Total	11.8	19.8	28.4	46.7	80.2	89.4

* \$50 million or less.

Source: Draft of "Credit Review Book # 4: Aids to Business and Non-Profit Entities," Office of Management and Budget, October 6, 1981.

business over a 25 year period shows steady growth. Measured by total loans and guarantees outstanding since 1954, small business assistance rates second only to export assistance, and is closely followed by transportation, economic, and military assistance. (See Table 4.3.) But credit assistance to small business grew most rapidly before 1974 and has not grown nearly as much as transportation and military credit assistance programs since the mid-1970's. (See Table 4.4.) The main SBA business lending program, for example, has for each of the past five years lent about the same amount of money in the same number of loans. (See Table 4.5.)

TABLE 4.4—*Average Annual Rate of Growth in Outstanding Loans and Loan Guarantees*

	1954-- 1959	1959-- 1964	1964-- 1969	1969-- 1974	1974-- 1979	1979-- 1980
Military assistance	-6.9	-11.8	26.3	31.9	39.3	21.9
Economic assistance	14.7	19.3	1.9	6.6	2.0	-0.8
Economic and community develop- ment	n.m.	n.m.	17.2	7.7	-7.3	-6.6
Transportation	14.2	7.0	5.1	33.5	28.7	13.9
Small business assistance	n.m.	20.1	16.3	26.4	16.1	7.7
Export promotion	4.7	6.0	10.0	9.1	9.5	7.7
Energy	—	—	—	—	—	n.m.
Other	-0.7	4.4	5.7	3.5	6.8	10.4
Total (Average)	5.3	11.0	7.5	10.5	10.8	-11.4

n.m.—not meaningful.

Source: Draft of "Current Review Book # 4: Aids to Business and Non-Profit Entities," Office of Management and Budget, October 6, 1981.

TABLE 4.5—Total SBA Direct and Guaranteed Loans: FY 1972–1981

[in millions of dollars]

YEAR	NUMBER	DOLLARS	CONSTANT \$ (1972)
FY 72	27,749	1,369.8	1,369.8
DIRECT	8,127	198.5	198.5
GUARANTEED	19,622	1,171.3	1,171.3
FY 73	33,650	1,942.3	1,937.7
DIRECT	6,430	234.1	221.5
GUARANTEED	27,220	1,759.2	1,664.5
FY 74	27,273	1,757.9	1,529.7
DIRECT	5,623	196.6	171.1
GUARANTEED	21,830	1,561.3	1,358.6
FY 75	22,241	1,431.0	1,139.7
DIRECT	6,046	253.7	202.1
GUARANTEED	16,195	1,777.3	937.6
FY 76	26,978	2,102.6	1,591.6
DIRECT	5,577	236.9	179.3
GUARANTEED	20,501	1,865.7	1,412.3
FY 77	31,793	3,154.4	2,255.9
DIRECT	6,673	344.9	246.7
GUARANTEED	25,120	2,809.5	2,009.2
FY 78	31,650	3,402.8	2,267.8
DIRECT	6,080	339.7	226.4
GUARANTEED	25,570	3,063.1	2,041.4
FY 79	30,096	3,501.1	2,150.9
DIRECT	6,150	380.6	233.8
GUARANTEED	23,946	3,120.5	1,917.1
FY 80	31,519	3,569.2	2,011.4
DIRECT	6,586	392.9	221.4
GUARANTEED	24,933	3,176.3	1,790.0
FY 81	28,650	3,393.8	1,772.1
DIRECT	5,437	333.0	174.3
GUARANTEED	23,213	3,060.8	1,597.8
TOTAL	291,599	25,624.9	17,926.6

Source: Office of the Controller, Budget Division, U.S. Small Business Administration.

The statutory bases for general small business credit assistance programs are the Small Business Act and the Small Business Investment Act. The Small Business Act was designed to assure the vitality of the private enterprise system by promoting free competition through the creation, preservation, and growth of small business. In addition, it mandates a Federal policy that fosters business ownership among individuals "who own and control little productive capital."

The Small Business Investment Act was designed to improve the

national economy through programs that stimulate the flow (where inadequate) of private equity capital and long-term loan funds to small business concerns. This policy is to be carried out "to ensure the maximum participation of private financing sources."

Under the aegis of these two Acts, the SBA provides credit assistance to small businesses in the form of direct loans, loan guarantees, and certain other programs. Originally, the loan programs were designed to assure access to credit where market imperfections were perceived. Over time, particularly in the case of direct loans, the objective of assuring access to credit has been broadened to include the provision of subsidies where individual businesses would otherwise be unable to survive competitively. Similarly, the justifications for programs authorized under the Small Business Investment Act (e.g., Development Company Loans and Small Business Investment Company financing) have been expanded to target the programs' contribution to job creation and regional economic development.

Equity Capital Environment

If the prospects of the credit markets seem less than encouraging to the small business borrower, historic trends in the equity markets are even less encouraging. Small firms face growing difficulty generating or retaining equity from both external and internal sources.

Inflation increases the difficulty of raising funds in the equity markets because of the higher rate of return needed to replace assets valued at pre-inflation cost. The tax and accounting systems in use do not account for the replacement cost of assets due to inflation.

Current accounting practices and existing tax policies have made internally generated funds an insufficient source of equity capital. The enactment of the Employee Retirement Income Security Act (ERISA) and the erosion in the real value of equity holdings have made it more difficult for small issuers to raise capital in the equity markets. It is only recently that pension funds have been allowed to flow into newly formed venture capital pools. The flight of individual investors from the traditional equity markets in record numbers² in the 1970's has diminished the depth and liquidity of the market for new issues and has increased the conservatism of the investment climate. This further discourages a small issuer contemplating a public stock offering.

² New York Stock Exchange 1981 Annual Report.

The merger, acquisition, and liquidation of the smaller securities firms by the larger ones, as well as the merger of some of the larger firms, will mean that many investment decisions and capital resource allocations will be made by a smaller and smaller number of securities brokers and dealers.

The elimination of the fixed rate commission system which was used by the securities industry until 1975, may be an important factor in the increased number of mergers or liquidations of the smaller and regional broker-dealers. According to a joint study conducted by the SBA and the Securities and Exchange Commission (SEC), fewer broker-dealers will survive inflation. This plus new competition and other adverse economic conditions will result in less investment research information generated about smaller issuers and prospective issuers.³

At the same time that equity markets might prove to be less attuned to small business, internally generated funds have declined almost consistently during the 1970's. As a result, many firms have taken steps to compensate for the effects of inflation and recession: wage and hiring freezes, postponement of capital expansion activities, and reduction in inventory levels. Another facet of the equity market problem is the underdepreciation of assets. A firm's inability to adjust for the current replacement costs of assets in an inflationary environment is brought about by restrictive financial accounting standards and decreased earnings. Under the existing tax law and the accounting conventions, a firm's capital base is further eroded.

The combined totals of Federal and state income tax liabilities and dividend payments have absorbed a larger percentage of adjusted pre-tax profits since the late Sixties. In 1966, taxes and dividends represented 64.4 percent of the adjusted pre-tax profits. In 1977 this was 80 percent. The 1977 percentage, while an improvement over the 1974 level in which after-tax profits were eliminated through tax liabilities and dividend payments, still inhibits capital formation and contributes to the loss of opportunities to increase economic productivity. The cut in the tax on capital gains in the Revenue Act of 1978 and the Economic Recovery Tax Act of 1981 will help this problem.

³ "The Role of Regional Broker-Dealers in the Capital Formation Process," U.S. Securities and Exchange Commission and the U.S. Small Business Administration, August 1981.

The Securities Act of 1933 requires that the sale of securities be registered and that full disclosure of the offering be made to the public. This procedure allows potential investors to make a reasonable judgment on the investment merits of a particular offering.

While there are obviously important public benefits from requiring accurate and standardized disclosure, small firms have experienced problems raising capital under the requirements of the 1933 Act because of the costs and contingent liabilities that accompany a full registration. This problem has inhibited the flow of equity capital to small growth firms.

There are three basic exemptions under the 1933 Act that attempt to provide relief to small issuers. They are Sections 3 and 4 of the Act and Regulation A. From the time of the enactment of the 1933 Act, the SEC has slowly increased the scope of the exemptions. However, until recently, the SEC has been more concerned with the size of the issue and the number of investors involved rather than the size of issuer required to meet the reporting and disclosure burdens of the Act. (For specific aspects of the exemptions see Appendix D.) Since the burden of compliance with the disclosure rules is greater for smaller issuers, tiering of regulatory requirements on the basis of size would be consistent with maximizing reasonable protection of investors and assisting smaller issuers.

The same size definition problem arises in connection with the Securities Act of 1934 which requires monitoring of and reporting by issuers of certain size. Reliance has been based on "numbers of shareholders" and "dollar amount assets" classifications rather than the size of issuer. Recently the SEC, for the first time, proposed structuring reporting requirements under the 1934 Act (including proxy statement and annual meeting requirements) to be classified based on various size categories including not only assets, revenues, and shareholders, but also size of the issuers defined by number of employees.

Currently, the SEC and the Office of Advocacy of the SBA are jointly conducting research to study the SEC's private registration exemptions and private offering rules to determine the amount of capital raised through private offerings, as well as the costs involved for each of the aforementioned exemptive rules. The results of this research may enable the SEC to ease registration and

disclosure requirements consistent with providing adequate protection to the investing public.

Impact of Federal Policy on Venture Capital Sources

Venture capital investment can be defined as the provision of early stage financing for growth and development companies. Currently, venture capital is needed in three major areas: (1) early stages of ventures, (2) the expansion of small growth companies that do not yet have access to public or long-term, credit-oriented institutional funding, and (3) management/leverage buyouts that revitalize major corporate divisions or absentee-owned private businesses. Three key characteristics which further define venture capital investment are:

- (1) equity participation for the venture capitalist either through direct purchase of stock, or through warrants, options and/or convertible securities;
- (2) long-term investment discipline that often requires a period of five-to-ten years for investments to provide a significant return; and
- (3) active, ongoing involvement by the venture capitalist in a company where value can be added to the investment.

While the venture capital market is a multi-billion dollar funding entity, it remains one of the most misunderstood subjects in the economy. The sources of venture capital have had difficulty in maintaining their resiliency in the current economic environment. The cost of venture capital increases with inflation. Therefore, the pressure for higher yields by the venture firms and the need for continuing financing of small companies and for new sources of venture capital have never been greater.

Professionally managed venture capital companies can trace their origins to the Small Business Investment Companies (SBICs) that were originally funded by the SBA. These are entities with private capital using SBA funds to leverage the original investment.

Before SBICs there were few venture capital companies, and fewer that were professionally managed. In 1981 SBICs accounted for over \$700 million of private capitalization with Government-provided leveraging of nearly \$800 million. Table 4.6 shows the number of new SBICs and the private capital they have to invest.

TABLE 4.6—Total New SBICs Licensed*

Calendar Year	Number	Private Capital (in Thousands)
1970	25	\$10,959
1971	28	8,821
1972	22	8,555
1973	22	9,396
1974	26	21,603
1975	29	16,168
1976	28	20,730
1977	35	23,127
1978	63	68,273
1979	39	46,800
1980	44	61,400
1981	35	39,687

* Includes Section 301(d) SBICs that invest in business owned by socially or economically disadvantaged persons.

Source: Investment Division, Small Business Administration.

Impact of ERISA on Small Business Venture Capital

The passage of ERISA in 1974 and the subsequently issued regulations have greatly inhibited the flow of new private capital to the venture area by directly prohibiting pension funds from investing in venture entities and speculative companies.

Recent legal and regulatory changes in ERISA, SEC regulations, and the tax laws have removed a number of these restraints on venture capital investing. Additionally, the capital gains tax reduction in 1978 has led to a dramatic expansion of the venture capital industry. While remaining static from 1969–78 at \$2.5 to \$3.0 billion, the total venture capital pool expanded by nearly \$800 million during the two-year period 1978–80 and by approximately \$800 million more in 1980. The additional reduction in the capital gains tax by ERTA is expected to be a stimulus to further expansion of the venture capital pool.

The size of the venture capital pool in 1981 is estimated to be \$5.0 billion. (See Table 4.7.) Of this sum, about one-third is currently in liquid assets and available for new investments.

TABLE 4.7—*Venture Capital Industry Estimated Fundings and Disbursements*

(millions of dollars)

Year	New Private Capital Committed to Venture Capital Firms	Estimated Disbursements to Portfolio Companies	Public Underwritings of Companies with a Net Worth of \$5 Million Or Less	
			Number	Amount
1981 (Est.)	\$1,300	\$1,200		
1980	900	1,000	(135)	\$ 822
1979	319	1,000	(46)	183
1978	570	550	(21)	129
Capital Gains Tax Decrease				
1977	39	400	(22)	75
1976	50	300	(29)	145
1975	10	250	(4)	16
1974	57	350	(9)	16
1973	56	450	(69)	160
1972	62	425	(409)	896
1971	95	410	(248)	551
1970	97	350	(198)	375
Capital Gains Tax Increase				
1969	171	450	(698)	1,367

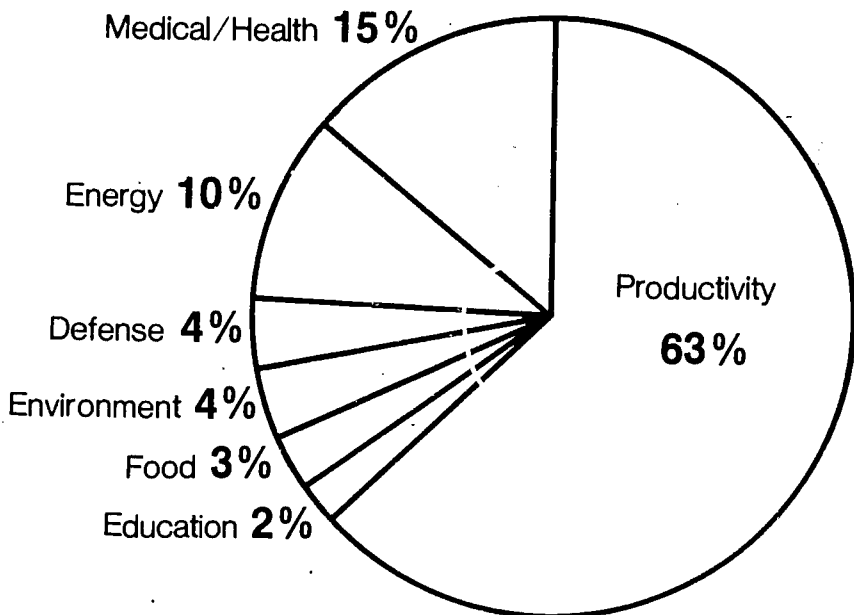
Total capital Committed to the Organized Venture Capital Industry
Estimate at September 15, 1981

Independent Private Venture Capital Firms	\$2.1 billion
Small Business Investment Companies	1.5 billion
Corporate Subsidiaries	1.4 billion
(Financial and Non-Financial)	
Total	\$5.0 billion

This pool remained static from 1969 through 1977 at some \$2.5 to \$3.0 billion (with new funding more or less equal to withdrawals).

Source: *Venture Economics*, Capital Publishing Company.

Results of research attempting to classify where the investments of venture capital funds were targeted in the 1970's is shown in the following chart.



Source: Venture Economics

Because the venture capital area is largely private and very complex, it is difficult to decide where funds can be invested. In the pension area, five years were necessary to decide that venture capital investing and prudent management of pension assets were inconsistent with the "prudent man rule." Tax policy should be examined in light of its possible effects on venture capital. If venture capital is to provide an adequate source of financing for the small business sector, more emphasis must be placed not just on increasing the flow of venture capital to the small business sector, but also on the number of professionally managed venture funds.

Small Business and Tax Policy

To evaluate the competitiveness of small business, the impact of the tax laws must be considered. The Internal Revenue Code has the capacity to influence many aspects of a business including the form of organization, the ability to assemble the necessary capital,

and the wage rates paid. Assessing the impact of the tax system on small business, however, is not a simple task. Moreover, the diversity of firms within the small business sector allows many tax provisions to be advantages for some and disadvantages for others. Finally, the ultimate impacts of some taxes are just not very clear owing to the complexity of the economy and the varying ability of business sectors to shift the burden (e.g., from workers to the firm through higher wage demands, or from the firms to consumers through higher prices).

The difficulty of accurately and comprehensively identifying the distortions caused by the tax system, coupled with their ability to produce major problems for the competitiveness of specific businesses, provides a powerful argument for paying close attention to the distortions in the Code and for striving toward tax neutrality. Recognizing the effects of marginal tax rates on incentives, the Economic Recovery Tax Act of 1981 (ERTA) was designed to reverse the distortions caused by the interaction of the Code and inflation. As the provisions of ERTA go into effect over the next few years, major improvements should occur in the incentives to work, save, and invest. An in-depth description of the specific effects of ERTA on small business is contained in Appendix E.

The tax system is made up of diverse elements. The most important are payroll taxes, personal income taxes, corporate income taxes, and capital gains taxes. Small businesses may choose whether to incorporate or not depending upon their particular circumstances and objectives. In many cases they may also qualify as Subchapter S corporations, which allow them to enjoy some of the benefits of both corporate and non-corporate status (i.e., proprietorship or partnership).

Small businesses tend to be labor-intensive. But the degree of labor-intensiveness varies greatly, and undoubtedly, many small businesses are even capital-intensive. Furthermore, the small business sector consists of firms engaged in a vast assortment of activities. Individual small businesses, however, can experience sharp changes in their competitiveness because of their tendency to be more specialized in their operations and their somewhat greater capital vulnerability. Consequently, tax changes that appear innocuous in the aggregate may be of critical importance in specific situations.

Tax-shifting can be important in determining the economic impact of a tax change, but it is hard to measure even after the fact

and virtually impossible to anticipate. Shifting occurs when wages, other costs of operating, or prices are adjusted in response to a tax change. Lower personal income tax rates, for example, may result in an easing of wage demands, thereby shifting some of the benefit to employers. Similarly, prices can be adjusted upwards to shift the cost of a tax increase to consumers. Such adjustments can occur even in highly competitive situations if all of the competitors experience the same tax change and costs or prices are forced to change for everyone.

There is unquestionably a need to continuously monitor the biases present in the tax system. The impact of the Code as a whole must be evaluated, particularly as inflation alters the importance of the various elements. At the same time, distortions in such economic choices as between labor and capital, the type of business organization, the use of borrowed versus equity capital, and the type of borrowing (tax-exempt, guaranteed loans, etc.) need to be carefully watched for their implication concerning the competitiveness of specific small business sectors. Where unexpected or undesirable tax consequences are detected, adjustments in the Code should be actively considered by the Congress.

Social Security

Social security is an issue of concern to small business. As outlined in preceding chapters of this report, small businesses are generally labor-intensive so that their labor costs are of great importance. The social security system is financed by a payroll tax, which is currently 13.4 percent of the first \$32,400 of a worker's annual earnings. The employer and employee each pay equal shares of the tax.

Social security provides retirement, disability, survivor, and health care benefits. To the extent that workers perceive social security as a fringe benefit, they may accept a lower wage rate. Thus it is generally argued that a large portion of the payroll tax is ultimately borne by the worker. Consequently, reducing the rate of growth of future social security benefits in real terms could lead workers to demand a higher wage or expect employers to provide substitutes, such as private pensions or life insurance.

More emphasis on private pensions could be beneficial to the economy. There is evidence that as social security benefits have

grown in real terms they have tended to replace private pensions and individual savings for retirement. As social security grows at the expense of private savings, the nation invests less, and economic growth suffers. Lower economic growth, in turn, reduces wages and employment and lowers the revenues of the social security system, requiring even higher tax rates to finance benefits. Encouraging private pensions, however, would result in more saving by businesses and workers, enhancing the pool of private capital funds.

Social security faces both a short and long-run financing problem. The short-run problem is due primarily to a combination of high inflation and slow economic growth over the last several years. Social security benefit payments have been growing more rapidly than the tax revenues paid by today's workers to finance those benefits. Although ERTA should stimulate growth and reduce inflation and thereby reverse this trend, additional steps may be needed in the short term to shore up ailing trust fund balances.

The long-run problem poses even greater concern. Today there are 3.2 workers per social security beneficiary. Due to demographic changes, however, that ratio will decline to two after the turn of the century. The tax burden on the working population to support benefits will become increasingly onerous, and a restructuring of benefits to workers retiring in the future may well be necessary.

A thorough examination of the role of social security seems to be needed. The President has created a National Commission on Social Security Reform to study the financing problems and make recommendations by the end of the year. These recommendations will preserve the original purpose of social security as a basic retirement pension and provide conditions favorable to economic growth.

SECTION II. IMPACT OF FEDERAL REGULATORY POLICY ON SMALL BUSINESS

Government-wide Regulatory Reform Efforts

Introduction. During the 1960's and 1970's a large number of Federal regulatory agencies were established. The resultant regulatory activity, which is in many instances uncoordinated, unintegrated and sometimes unnecessary, causes a heavy and

accumulating cost burden on small business. A 1979 SBA study revealed that paperwork burdens alone cost small business \$12.7 billion per year. A research study funded by the SBA and conducted by Battelle Human Affairs Research Center demonstrated that regulatory costs are exponentially higher per unit of sale for firms with fewer than 50 employees than for larger firms.⁴

Small business has repeatedly claimed that uniform application of the same regulations to them and to larger entities produces economic inequity. There is considerable evidence that uniform application of regulatory requirements increases the minimum size of firms that can compete effectively in the regulated market.⁵ The fact that small business spreads these burdens across a smaller sales base eventually led to the conclusion that these disproportionate economic burdens on small business were key contributors to declines in productivity, competition, innovation, and the relative market shares of small business.

In 1963 the small business share of the Gross National Product (GNP) was 43 percent. By 1976 that share had dropped to 39 percent, according to an SBA study.⁶ A major contributing factor is the overall regulatory burden small business is being asked to carry.

To address the problem the Congress and the Administration have taken certain steps. Congress has passed the Regulatory Flexibility Act and the Paperwork Reduction Act as directives to agencies to reduce the impact of regulations. The Administration, through the efforts of the Office of Management and Budget (OMB), and the Office of the Vice President, has proceeded with various regulatory initiatives.

Legislative Reform

The Regulatory Flexibility Act. The Regulatory Flexibility Act (RFA) provides for rigorous regulatory analysis of proposed rules

⁴Battelle Human Affairs Research Center, "Complying with Government Requirements, The Costs to Small and Larger Businesses," report completed under SBA grant no. SA-1A-0004-01-0, September 1981.

⁵"Smaller Enterprise Regulatory Improvement Act," Report of the Committee on Small Business, U.S. House of Representatives, Report 96-519, October 17, 1979.

⁶Joel Popkin and Company, "Strategy for a Micro-Data Base for Small Business," Progress Report of March 12, 1980. (Prepared for the Small Business Administration under contract no. 2624-0A-79.)

that would exert a "significant economic impact on a substantial number of small entities." When such an effect does not occur, the RFA provides that an agency can so certify the fact, and thereby eliminate the necessity for a regulatory analysis. The RFA also requires agencies to review existing regulations periodically and to publish agendas of forthcoming rules. Finally, the RFA gives responsibility for monitoring Federal agency compliance with its provisions to the Chief Counsel for Advocacy of the SBA.

The requirement for preparation of both initial and final regulatory analyses by agencies is an important and fundamental step forward for Federal rulemaking. This process has already stimulated greater agency awareness of the impact of Federal actions on small business. The RFA also requires agencies to consider paperwork requirements and burdens of proposed regulations prior to issuing rules. By making these analyses the agencies have been required to defend their regulatory activities publicly.

The RFA further requires that agencies review all existing regulations. Most major agencies have now published a review plan and are coordinating their efforts with the Presidential Task Force on Regulatory Relief in its Government-wide review of existing regulations. These actions provide a rigorous review of future regulations in coordination with a Government-wide review of existing regulations.

A significant benefit to small business of the RFA is its requirement that agencies semiannually publish in the *Federal Register* an agenda listing rules they intend to promulgate in the future. Publication of these agendas substantially lengthens the amount of time that the small business community has to react to these proposals and discuss them intelligently with the Federal agencies.

The RFA also designates a single office, the Chief Counsel for Advocacy of the SBA, to monitor the performance of agencies in regulating small business. The Chief Counsel is to report on agency compliance with the RFA to the President and to four Committees in Congress at least annually.⁷ Further, the Chief Counsel is authorized to appear as an *amicus curiae* (friend of the court) in any action to review a final rule.

The RFA encourages agencies to develop alternative regulatory techniques, such as "tiering," to lessen regulatory requirements on

⁷ The four Committees are: The Senate Select Small Business Committee, the House Small Business Committee, the Senate Judiciary Committee and the House Judiciary Committee.

small business. Tiering involves establishing different or less burdensome regulatory approaches for small business than for large. In the first year under the RFA, some Federal agencies have demonstrated that the concept of tiering can work. They have also demonstrated that Federal agencies can regulate smaller entities effectively without abrogating statutory responsibilities. In October 1981, the Chief Counsel for Advocacy reported to the House Committee on Small Business that compliance with the RFA by the Federal agencies to date had been mixed but encouraging.

A notable downward trend in new Federal regulatory activity has occurred. For example, the number of rules issued in 1981 has significantly decreased from 1980 levels. No doubt the transition in Administrations played a part in this, as well as the President's Moratorium on Final Rulemaking which went into effect in January of 1981. The RFA has contributed to this more deliberate approach to rulemaking.

The Paperwork Reduction Act. The Paperwork Reduction Act of 1980 (PRA) (P.L. 96-511) also addresses the regulatory problems of small businesses. It vests broad authority to approve new proposed paperwork forms in the Director of OMB, and creates an Office of Information and Regulatory Affairs to discharge the Director's responsibilities.

Most significantly, the PRA imposes uniform standards and eliminates overlapping agency information collection requirements; limits existing burdens and sets goals for reduction of Federal paperwork burdens (15 percent by October 1, 1982, and a further 10 percent reduction by October 1, 1983); prohibits agencies from collecting information from the public without first consulting OMB and demonstrating that the information requested is useful and does not overlap other requirements; and provides that after December 31, 1981, no business or citizen need comply with a Federal information collection request that does not contain an OMB clearance number on its face.

Federal paperwork burdens are a prime source of frustration for small business. Implementation of the PRA holds great promise for reducing this burden.

Proposed Regulatory Reform Act of 1980—S.1080. Legislative attention to regulatory reform continues in the 97th Congress. Enactment of the proposed Regulatory Reform Act, S.1080, would augment the small business benefits attributable to the RFA. While the RFA requires only a reasonable basis for the adoption of a particular regulatory alternative chosen for a major rule, this bill would

additionally require a showing that the regulatory alternative chosen is the most cost effective. The bill would also prohibit courts from presuming the validity of the agency interpretation of the law supporting the adoption of the rule.

Executive Branch Regulatory Initiatives: On January 22, 1981, the President appointed Vice President Bush to head a Regulatory Reform Task Force, to review existing and proposed regulations and to oversee the development of legislative proposals. On January 29, 1981, President Reagan placed a 60-day moratorium on issuance of final rules in order to review them. In February he signed Executive Order 12291, which provides new directives on regulatory procedures for the executive agencies and supplements the coverage and application of provisions of the RFA.

Executive Order 12291 authorizes OMB to clear final decisions and drafts of proposed major rules and requires agencies to submit to OMB a Regulatory Impact Analysis of major proposed rules. The analysis must demonstrate that the potential benefits of the proposed regulations outweigh the potential costs. Executive agencies must also submit regulatory agendas detailing agency plans for future rulemaking.

In the same announcement, the Vice President addressed the special problems of small business and initiated a combined effort with the SBA's Office of Advocacy and the Commerce Department to focus on small business regulatory problems and urged the public to write and tell him of their problems.

A review of the letters sent to the Vice President indicates that small business regulatory problems can be categorized into roughly six general areas: (1) disagreement with the regulation itself; (2) enforcement problems with inspectors, including fines or costs of appeals; (3) costs of compliance, such as expenses for equipment; (4) administration requirements, which include licensing and permits; (5) communication issues with agency officials on interpretations, definitions, etc.; and (6) paperwork requirements, which are time consuming even when understandable.

Labor regulations generate the most complaints especially in the areas of affirmative action rules, safety and health regulations, sexual harassment and discrimination rules, and minimum wage requirements. Tax regulations, environmental rules, residential and commercial building standards, trade regulations, and agricultural labeling and inspection requirements follow close behind.

Impact of Labor Regulation

Introduction. Federal labor policy has developed on several tracks since the 1930's. Congress, the Courts, and the Executive Branch have all had a hand in developing standards to regulate wages and hours of labor, employee benefits, employment practices, and physical safety on the job. Other Federal policies affect a wide variety of labor concerns, such as poverty, race relations, environmental issues, and collective bargaining. The stresses and burdens of outmoded or unnecessary labor regulations are felt particularly keenly by small businesses because they are labor-intensive.

The issues discussed below are examples of highly regulated areas, particularly in regard to their impact on small business: the Employee Retirement Income Security Act (ERISA), the Davis-Bacon Act, the Service Contract Act, the Office of Federal Contract Compliance Programs (OFCCP), and the Occupational Safety and Health Administration (OSHA).

Employee Retirement Income Security Act

Background. The Employee Retirement Income Security Act (ERISA) was enacted in 1974. ERISA established minimum standards for participation, vesting, and funding, and required plans to meet certain reporting, disclosure and fiduciary requirements. In addition, Title IV of the law established a guaranteed termination insurance program for defined benefit pension plans funded by premiums paid by plans.

The law is a complex one, involving tax and labor laws and affecting the banking, securities, insurance, real estate, and other sectors of the economy. The complexity of the law and the requirements it poses present many problems for small business.

The General Accounting Office conducted a study of the "Effects of ERISA on Pension Plans with Fewer Than 100 Participants"⁸ in 1979. It found

... about 18 percent of the plans have been terminated and about 82 percent continued. The Act was a major factor in the decision to terminate about 41 percent of the plans no longer in existence. Of the plans continued, 89 percent had to be revised to meet the Act's employee protection requirements ... about 46 percent of the plans

⁸ HRD 79-56, April 16, 1979.

which were terminated did not meet the Act's minimum participation and vesting standards, which are designed to guarantee that employees benefit from a pension plan without having to meet unreasonable service and age requirements. Also, about 28 percent of the sponsors who terminated plans provided or planned to provide continuing pension coverage for their employees through new or existing employer-sponsored plans.

The one-time cost to revise the plans to comply with the Act's requirements and the annual costs to administer plans in accordance with the Act resulted in an increase in total estimated administrative costs of \$553 million, or about 352 percent. However, about 67 percent of the increase was one-time cost to revise the plans to meet the employee protection requirements of the Act. The rest was for increased annual administrative costs.

In 1977 a survey⁹ was conducted by the Retirement Administrators and Designers of America of certified public accounting firms that service small business. The survey found that many small employers are discouraged by ERISA from setting up qualified pension plans. According to the study, 69 percent of the employers who terminated pension plans cited ERISA as the reason for termination. Common small business complaints are that the rules are too complex, compliance with the many paperwork requirements is burdensome, and delays in issuing rules, opinions, and exemptions make it more difficult to understand what constraints exist on a specific pension plan.

Amendments to the Multiemployer Pension Plan Amendments.

Since ERISA's enactment, the Multiemployer Pension Plan Amendments Act of 1980¹⁰ has been the only major substantive change to ERISA. The purpose of the 1980 revision was to strengthen the funding requirements for multiemployer pension plans, to authorize plan preservation measures for financially

⁹ This survey was conducted by Retirement Administrators and Designers of America, a nationwide organization of twenty-three pension consulting firms which service an estimated 6000 qualified plans, principally in the small employer area. Five hundred CPA firms were surveyed (excluding the "Big 8"). Twenty-seven percent (135 firms) responded to the questionnaire.

¹⁰ P.L. 96-364; signed into law on September 26, 1980.

troubled multiemployer plans, and to revise the manner in which the pension plan termination insurance provisions apply to multiemployer plans. Under the new law, the insurable event was made plan insolvency rather than plan termination. In addition, employers were required to pay withdrawal liability to the plan at the time of their withdrawal rather than pay contingent liability to the Pension Benefit Guaranty Corporation (PBGC) if the plan terminated within 5 years of their withdrawal.

Prior to passage of the Multiemployer Act, employers in multiemployer plans generally could withdraw from a plan with no further responsibility for benefits not funded under the plan. As amended by the Act, ERISA now requires that all withdrawing employers fund a share of the plan's unfunded liabilities when they withdraw. This "withdrawal liability" is paid off by the employer basically at the yearly rate paid by the employer prior to withdrawal; in no case will the employer make these payments for more than 20 years. However, there is no across-the-board net worth limitation on the withdrawing employer's liability. Thus, in some cases, assessment of this withdrawal liability may exceed the company's net worth. This has proved to be a major obstacle to small companies that want to sell assets, merge with another company or engage in various other common business transactions.

While no solution to this problem has been decided upon, one option would be to exempt certain companies from these provisions when there is a change of contributing sponsor rather than withdrawal from the plan. In addition, to help prevent increasing large liabilities resulting in heavy withdrawal penalties, a plan trustee's ability to increase future benefits paid to plan participants and beneficiaries could be limited.

Retirement Income Incentives and Administrative Simplification Act

A second potentially major change to ERISA is currently under consideration in the Congress: the Retirement Income Incentives and Administrative Simplification Act of 1981.¹¹ The bill makes substantial changes in the reporting and disclosure, fiduciary, and other provisions of ERISA. Title VI of the bill revises the termination insurance provisions for single employer plans. Also, the bill establishes a single agency to administer ERISA.

Fundamental restructuring of the single employer termination insurance program is needed not only to insure its soundness but

¹¹ S. 1541; H.R. 4330.

also to provide for more effective administration.

The Administration has testified in favor of the bill's single employer termination insurance changes, with certain amendments. The bill addresses one major problem with current law by changing the event that generates PBGC guarantees from termination of the plan to liquidation of the firm. In addition, the PBGC's status in bankruptcy is changed from having a preferred claim on 30 percent of the company's net worth to having the same status as other general creditors, whose claim will be equal to the amount of the fully guaranteed benefits.

The bill also assures that businesses cannot shed unfunded pension liabilities by spinning off or selling weak subsidiaries or divisions. The bill corrects this by providing for contingent liability on the part of the seller and the control group within certain time periods. We believe, however, that there should be an exemption from contingent liability for all plans with unfunded vested liabilities under a certain amount, perhaps \$500,000. This exemption would help the many small businesses that are sold to new owners each year.

Single Agency Legislative Proposals. A number of legislative proposals have recommended that the responsibilities for ERISA, which are now shared by the Departments of Labor (DOL), Treasury and the PBGC, be consolidated within a single new agency. The principal problems of multiple jurisdiction arose immediately after passage of ERISA. The existing shared jurisdiction between DOL and Treasury has been responsible for certain duplications of effort as well as delays in promulgating certain ERISA regulations.

There has been considerable improvement in administration due to the concerted efforts of the respective departments to reduce duplication, coordinate plan filing requirements, and generally cut down on required paperwork. While the present system is working, small businesses perceive compliance with regulations of three separate agencies for one area of law as costly, confusing, and inefficient.

Administrative Changes

Paperwork Reduction. Small employers are disproportionately burdened by ERISA paperwork and are generally discouraged by complex reporting and disclosure requirements and all the additional paperwork involved in setting up and administering a pension plan. While the DOL has taken some limited steps to simplify reporting and disclosure for small plans, the burdens remain

unnecessarily heavy. Reducing these burdens has to be a top priority. The Presidential Task Force on R gulatory Relief has designated ERISA regulations as one of its chief targets in 1982. In addition, DOL has been closely examining existing requirements and is committed to simplifying them.

An example of where simplification is needed is the Summary Annual Report (SAR), which ERISA requires to be prepared and given to participants. The SAR is rarely read and is too technical to be understood or used by covered employees. As an alternative to the SAR, some have suggested that employers could report relevant information to employees, and allow interested employees to review pension plan books and records upon request.

Prohibited Transactions Rules. The ERISA prohibited transactions rules are necessary for DOL to enforce the ERISA fiduciary provisions properly. At the same time, they can be quite burdensome on normal transactions in that in many instances, the regulations do not reflect real-world events. One way to reduce the cost of small business compliance would be to clarify prohibited transactions rules and simplify the approval process. Administration proposals for class exemptions should provide a vehicle for consideration of these small business concerns.

Other Changes. The Presidential Task Force on Regulatory Relief has focused on several other ERISA regulations as being overly burdensome on small business. Both the Department of the Treasury and DOL are reviewing these areas to see what can be done quickly.

Davis-Bacon Act.

The Davis-Bacon Act of 1931 was enacted in order to prevent itinerant contractors, using cheap labor, from entering and disrupting marketplaces by undercutting local contractors bidding for Federal construction contracts. This primary objective was to be achieved by requiring contractors to pay, at a minimum, wages equal to those "prevailing" in the community where the Federal construction was to be performed.

The major problem for small business under the Davis-Bacon Act stems from the regulatory process DOL uses to set "prevailing" wage rates for job categories. Often the resulting wage has been set above actual area wage rates. Currently, those regulations that govern the method for determining the prevailing wage, as well as those imposing burdensome reporting requirements, are being revised. If finalized, these modifications will make administration of the Act fairer. Small businesses contend that these changes may be

quite limited when considering the total impact of the Act on present-day construction levels. For that reason, legislation exempting small contracts from the Davis-Bacon Act is under consideration by the Congress.

Many small business groups have supported efforts to raise the threshold contract size for compliance from \$2,000 to a higher level. They argue that by tiering compliance burdens, small construction firms could be encouraged to compete for Government projects at a substantial savings to the taxpayer while reducing the regulatory burden on the small business community.

Service Contract Act.

The Service Contract Act requires that any Federal contract in excess of \$2,500, the principal purpose of which is to furnish services through the use of service employees (as opposed to administrative, professional, or executive employees), must provide minimum wage rates and fringe benefits as established by DOL. It is estimated that between \$5-\$10 billion is spent annually on Federal service contracts, 75 percent of which are wages and fringe benefit costs.

Recent administrative practice has been to include contracts under the Service Contract Act regulations that go beyond those originally intended. For that reason, DOL has proposed to exercise its authority under the law and narrow the Act's application by exempting the following areas from coverage: maintenance of automated data processing equipment, research and development services, sale of timber from Federal territory, and medical and scientific apparatus maintenance.

Small business' major complaint with Government contracts has been the mandated wage rates which decreased the participation of small firms in bidding for Federal contracts. Currently, the regulations that govern the method for determining the prevailing wages, as well as those imposing cumbersome reporting requirements, are being revised and, if finalized as proposed, will reduce small business burdens.

Office of Federal Contract Compliance Programs.

(OFCCP) Executive Order 11246, as amended, was issued in 1965, and prohibits Government contractors from discriminating against any employee or applicant for employment based on sex, race, color, religion, or national origin, and requires contractors to take affirmative action in the workforce. Responsibility for enforcement of the Order was placed with the Secretary of Labor.

While the intent of E.O. 11246 is admirable, the administrative

practices and policies of the OFCCP have not achieved this goal. It has long been a major concern of business that the OFCCP has lost sight of the program's original intent: to promote the recruitment, training, and hiring of minorities and women.

DOL recognized the cumbersome effect of the OFCCP on small firms, and in accordance with the Regulatory Flexibility Act (RFA), proposed rules exempting most small firms from the paperwork burdens of affirmative action plans (AAPs). The proposed rule would require contractors retaining at least one \$1,000,000 Government contract (as opposed to the present \$50,000 level) and 250 or more employees (as opposed to the present 50) to prepare a written AAP. Those firms not meeting the proposed thresholds, yet retaining a Government contract in excess of \$10,000, still would be prohibited from discriminating in employment and would be required to practice affirmative action; however, the burden of developing and implementing a written AAP would be lifted. If finalized, OFCCP's proposed revisions would ease much of the regulatory burden on small firms without significantly diminishing its jurisdiction over employees of Federal contractors.¹²

Occupational Safety and Health Administration.

Before the Occupational Safety and Health Act was enacted in 1970 there existed a plethora of Federal safety and health laws confined to specific groups of workers. This Act is a single comprehensive safety and health law "to assure as far as possible every working man and woman in the Nation safe and healthful working conditions." Until recently, the Occupational Safety and Health Administration (OSHA) has been the target for complaints by thousands of small businesses.

Chief among small business' complaints is the targeting and over-inspection policies of OSHA. According to a Bureau of Labor Statistics analysis of County Business Patterns in FY 1979, OSHA was inspecting small establishments (where employees are grouped in one physical location) to a greater extent than the proportion of employees they represent. Almost 30 percent of all inspections were in establishments with 10 or fewer workers (covering 17 percent of all workers) and nearly 50 percent of all inspections were of firms employing 25 workers or less (accounting for nearly 30 percent of all workers). Considering that businesses with greater than 26 employees represent more than 70 percent of all workers and

¹² 46 FR 42968 August 25, 1981. DOL Initial Regulatory Flexibility Analysis estimates that of the 16,767 Government contractors presently required to develop an AAP, over 12,000 small businesses will be exempted. Yet 77 percent of all employees of Government contractors will still be covered by a written AAP.

are responsible for 72 percent of all fatalities, it is understandable that small business felt overburdened.

In October 1981, OSHA modified its procedure for targeted inspection scheduling of the general or manufacturing industry. The new procedure deletes from the official list of establishments those general industry firms with 10 employees or less. Additionally, OSHA will no longer, under normal circumstances, conduct general safety inspections at work sites where safety records show the number of workdays lost to injury each year is beneath the industry-wide average of 5.2 days per 100 workers.¹³ OSHA will continue to inspect small facilities on complaint.

Another target for criticism by small business is OSHA's inconsistency in levying penalties. OSHA has no fixed penalty schedule and is reluctant to develop one because administrative flexibility to look at "good faith" efforts and "history of previous violations" would then not be permitted.

Current policies, which mandate stricter adherence to National Office directives, will eliminate unneeded inspections, concentrate OSHA's workload on protecting worker safety and health where it is most seriously threatened, and create a more favorable working relationship with small business. In addition, OSHA is now working with small business trade associations to consider better ways to assist small businesses, including the increased use of five state consultation services.

Impact of Federal Health, Safety and Environmental Regulations

The economic impact of health and safety regulations on small business is great. However, the benefits and/or effectiveness of these rules are often difficult, if not impossible, to measure. The primary short-term impact of this type of regulation is often adverse because such regulations sometimes require large expenditures of capital and employee time. This creates economies of scale in regulatory compliance that alter small business' ability to compete in certain industries. The sizeable economic impact is reflected in one estimate that environmental and occupational safety and health rules alone reduce U.S. productivity growth by one-third of a percentage point annually.¹⁴

¹³ Industry-wide average calculated annually by Bureau of Labor Statistics. Last revision: November 1981.

¹⁴ Edward F. Dennison, "Effects of Selected Changes in the Institutional and Human Environment Upon Output Per Unit of Input," *Survey of Current Business*, January 1978.

Historically, regulatory standards have been imposed on businesses with no analysis of their ability to comply or of the need for regulating a business of that size. The Regulatory Flexibility Act mandates that all Federal agencies consider regulatory alternatives, such as tiering, that accommodate both small business needs and regulatory goals. By requiring agencies to analyze and address the economic impact of their regulations on small business, fairer treatment of small business interests should result. For example, OSHA now mandates that small businesses be given longer phase-in times and greater assistance in compliance.

Traditional Economic Regulation Impacts

Regulation of prices and market entry are key aspects of the oldest forms of Federal regulation. Railroads, utilities, telegraph companies, trucking companies, broadcasting companies, airline companies and other industries are all subject to varying degrees of Federal economic regulation. Regulatory statutes for these industries were enacted decades ago, often to protect small users or service providers. In the intervening years, new technology and changing markets have made aspects of many regulations obsolete. Regulatory controls have served to restrict new, small firms from entering markets, to limit price competition between existing companies, and to narrow the range of services available to the public.

The high costs of economic regulation have resulted in a series of deregulatory efforts in the past decade, such as the Motor Carrier Act of 1980, the Staggers Rail Act of 1980, and the Airline Deregulation Act of 1978. These laws phase out entry control, rate regulation, and antitrust immunity for collective rate setting. Estimates of the savings from the Motor Carrier Act alone range from \$2-\$5 billion annually. In the airline industry savings were estimated at \$1 billion annually for 1978 and 1979.

The unique impact of economic regulation on small business results from the increased market rigidity imposed. In the trucking industry, for example, small carriers are less able to afford the lengthy administrative battle necessary to apply for a trucking license. Tariff filing requirements and the pervasive role of rate bureaus make it difficult to price independently and competitively. Restrictions on leasing of vehicles make it difficult for smaller companies to use trucks efficiently. Small shippers who rely on the trucking industry are similarly disadvantaged when a carrier can-

not easily adapt a service offering or change a rate or route to meet the needs of the smaller entity. The complexity of the class rate system, and the rate bureau and rate regulatory process, creates a premium on regulatory expertise that is not available to many small shippers. While small shippers and small carriers are expected to benefit greatly from recent deregulation of the trucking industry, it is likely that the full benefits will not be felt until the remaining regulations are eliminated.

Other deregulatory efforts in banking, broadcasting, airline, telecommunications, agricultural marketing, and rail industries can be expected to increase similar opportunities for small business if progress is made in eliminating entry barriers and other regulatory restraints on competition rather than simply freeing existing regulated firms from rate regulation.

In this regard, it is important to acknowledge the impact of anti-trust immunities enjoyed by many regulated industries. The impact of these statutory exemptions from the basic laws of competition has been well documented¹⁵ and elimination of the special exemptions contained in the several laws would be a significant small business achievement.

Regulation of Government Procurement

Background. Federal procurement of goods and services is a \$110-billion-a-year business involving one-fifth of the Federal budget, more than 130,000 Federal employees working in over 100 Federal agencies, and over 17 million procurement actions a year. Another \$30 billion is spent on procurement under assistance programs, according to figures provided by the Office of Federal Procurement Policy (OFPP).

Of the \$110 billion procurement expenditure in FY 1980, 90 percent, or \$99.6 billion, was accounted for by contract actions of more than \$10,000. However, 97.5 percent of procurement actions involved contract actions under \$10,000, and 2.5 percent involved 434,000 contract actions of \$10,000 or more.

P.L. 95-507 requires that small businesses receive all Federal contracts of \$10,000 or less which are considered small purchases (unless responsive small offerors cannot be found). Of contracts

¹⁵ Report to the President and the Attorney General of the National Commission for Review of Antitrust Laws and Procedures, January 22, 1979; "Antitrust Exemptions and Immunities," hearing before the Subcommittee on Monopolies and Commercial Law of the Committee on the Judiciary, House of Representatives, March 19, 1977.

over \$10,000, small business received \$14.8 billion, or about 15 percent of large contract dollars. Of the total Federal procurement expenditure, small business received \$25.4 billion, or 23 percent.

Small businesses are generally concerned with what they perceive to be their low level of participation in the Federal procurement process. While small business creates approximately 38 percent of the GNP, its market share of Federal procurement is considerably less: 23 percent. Moreover, in recent years, the small business' market share of Federal procurement has been declining.

Small Business Concern with the Current Procurement System. Small businesses generally view the following issues as impediments to their securing a higher share of Federal procurement dollars: complexity and inconsistency of the current procurement system; general failure to implement laws intended to increase the small business share; extensive government competition with the private sector; and slow or late payments to small contractors.

The existing procurement system has become too complex for small business participation, and, in some cases, has prevented small business from getting its fair share of total Federal procurement dollars. The complexity of the system stems from inconsistencies in the Armed Services Act and the Federal Property Act and amendments to those laws. A survey of nineteen agencies conducted by OFPP in 1978 and in 1979 found that there are 485 offices regularly issuing procurement regulations, 877 different sets of regulations, and 64,600 pages of regulations in effect. Twenty-one thousand and nine hundred new or revised pages of procurement regulations are issued each year.

Other small business problems that flow from the complexity of procurement practices exist. First, adversarial relationships between Government and its suppliers are created by the cumbersome, costly, and frustrating procurement process. Second, nearly one-half of the contract funds are not let on a competitive basis. Third, burdensome paperwork requirements increase program costs and contract prices and discourage participation by small contractors.

Fourth, there is a general disparity in the Federal incentives to small and large business procurement. Recent research by the Office of Advocacy indicates that large firms receive about \$2 billion a year more than small firms in monies tied to Independent Research and Development/Bid and Proposal costs. These are not costs related to doing business as much as they are subsidies to certain companies in obtaining further Federal contracts.

Fifth, overly rigid specifications for technical products are often developed cooperatively with large businesses and then used as a basis for non-competitive negotiations with those same large firms.

Sixth, small business cannot afford to participate in fixed price contracts for high risk performance.

Seventh, the lack of sufficient numbers of competent and well-trained contracting professionals has hindered small business participation.

Failure to Implement Beneficial Federal Procurement Laws. Public Law 95-507 was enacted in 1978 to increase contracting and subcontracting opportunities for small businesses, particularly for minority small businesses. Among other things, the law requires each solicitation for contract bids of over \$500,000 (and \$1 million for construction) to contain a plan to subcontract a part of the work to small business. Failure to submit such a subcontracting plan should result in a denial of the award and be considered a factor in any future awards.

The desired dramatic increase in small business participation in subcontracting has not been realized, partly because contracting officers have not been diligent in enforcing it and partly because SBA has been unable to monitor performance under this provision.

Random surveys of large contracts indicate that plans do not include small business subcontracting plans. A major effort to encourage the procurement agencies to enforce these subcontracting provisions is necessary.

Uniform Federal Procurement System. In 1972 the Congressional Commission on Government Procurement made 149 specific recommendations, the cornerstone of which was that an Office of Federal Procurement Policy be established to provide leadership in the development of Government-wide procurement policies. In response Congress enacted the Federal Procurement Policy Act in 1974 which established OFPP as a part of OMB. The initial authorization of five years was to provide "... overall direction of procurement policies, regulations, procedures and forms for executive agencies..." In 1979 OFPP was reauthorized for an additional four years. Congress has recognized that a comprehensive approach to the Federal Government's procurement is necessary. Thus, it has directed OFPP to develop and propose a uniform, comprehensive, innovative procurement system for use by Federal agencies without regard to current barriers or statutory requirements.

In October 1981, OFPP circulated for public comment a draft proposal entitled "A Legislative Proposal for a Uniform Federal

Procurement System" as required by P. L. 96-83. The first and most important change proposed by the new Federal Procurement System Act is the requirement that OFPP promulgate rules and regulations with notice and comment rulemaking procedures. If these procedures are adopted, all rules proposed under this Act would be covered by the Regulatory Flexibility Act's requirement for analysis of the proposed rules' impact on small businesses. Such a process of analysis should result in a procurement system more in tune with the needs of small business.

In addition, the Federal Procurement System proposed legislation would benefit small business by:

- Utilizing commercial products to the greatest extent possible and using commercial practices, terms and conditions;
- Establishing the general policy that the Government should rely on private enterprise to supply the products and services it needs;
- Implementing an equitable profit policy to allow profits commensurate with market place risks;
- Utilizing solicitations that would use functional standards and specifications instead of design types;
- Encouraging contract administrators to be more user-oriented;
- Assigning individual responsibility, authority, and accountability for procurement;
- Simplifying, clarifying, and integrating the entire Federal procurement system;
- Making the Federal Acquisition Regulations consistent with other policies and regulations of the Federal Government; and
- Providing for acceptance of valid, unsolicited proposals.

Government Competition. Government competition with small business threatens the viability of many small businesses and discourages many from doing business with the Federal Government.

In an often-cited study¹⁶, OMB has estimated that Federal employees perform 11,000 commercial or industrial activities, many of which could be performed by small business. The cost of these activities was approximated to be \$19 billion. In 1979 a Task Group on Government Competition established by the Office of Advocacy of SBA estimated potential savings to the taxpayer of \$2.98 billion annually if 85 percent of those in-house activities cur-

¹⁶Report to the Congress by the Comptroller General of the United States, "Civil Servants and Contract Employees: Who Should Do What for the Federal Government?" (FP CD-81-43) June 19, 1981, p. 15.

rently justified in *non-cost* terms were opened up to competitive bids.

The statistics compiled by SBA on the rate of small business participation in Federal procurement are not encouraging. Despite the efforts of SBA and the various Offices of Small and Disadvantaged Business Utilization in contracting agencies, the average annual increase in percent of total Federal procurement awarded to small business between 1970 and 1978 was less than 1 percent. In fact, since 1979, the small business share of total Federal procurement has actually been declining. Preliminary figures for 1981 indicate that this downward trend is still continuing.

Slow Payment to Small Contractors. Another urgent problem for small business is slow payment of contract obligation by Federal agencies. Late payments are a form of involuntary credit extended by small businesses to the Federal Government at no interest. This is credit which small businesses cannot afford to extend. Many small business people with good performance records have discontinued business with the Federal Government because of late payment problems. The General Accounting Office (GAO) has estimated the cost of these late payments to the private sector to be between \$150 and \$375 million.¹⁷

Impact of Federal Policy on Innovation and Patents

Introduction. The impressive small business contribution to innovation is well documented. A recent House Small Business Committee report found that small firms demonstrated an "unusual ability to innovate which makes their contribution far greater than their size."¹⁸

The report describes the important inventive contributions made by independent inventors and small companies in the Twentieth Century—far-reaching inventions such as penicillin, polyester fiber, zippers, the helicopter, the polaroid camera, kodachrome film, xerography, and the ballpoint pen.¹⁹ The House Report further notes that innovative companies contribute more to employment and tax revenues than mature firms.

Impact of Federal Policies on Small Business Innovation. As small businesses progress through various stages of growth, they are af-

¹⁷ GAO Report to David Stockman and Donald Regan, B-204733, October 8, 1981, p. 6.

¹⁸ House Small Business Committee Report, to accompany H.R. 432, November 20, 1981, pp. 6-8.

¹⁹ *Ibid.*

fects by various Federal policies and regulations such as those governing the commercialization process, financing, procurement, taxation, and patents and copyrights.

Federal Regulation. A prime example of the problems created by Federal regulation is the testing and approval procedures for new drugs and medical products required by the Federal Food and Drug Administration prior to commercialization. Small innovative manufacturers cannot afford such delays, often 7 to 10 years, because creditors and investors require a much more immediate payback. The delayed return on investment results in a concentration of innovation in larger firms which are better able to underwrite the full costs associated with new products.

Financing. Capitalization of new, innovative firms is difficult because they are generally high-risk and potential investors are hard to attract.

Current Federal grant assistance, which is important in bridging the "capital gap" that develops for most firms from the time a prototype is developed until commercialization, is limited. Venture capital funds are available through programs such as the SBIC Program, but these Federally-funded programs involve heavy paperwork burdens for the few firms fortunate enough to receive funding.

Access to funding through public offering is also difficult for the small innovative company. Generally, stock offerings must meet the requirements of the Securities Act of 1933 and the Investment Company Act of 1940 governing public securities filings.

Procurement and Research and Development Assistance. The level of Federal support of small business through research and development (R&D) grant expenditures is insufficient according to many representatives of the small business community. Only about 4 percent of the \$40 billion the Federal Government spends on R&D goes to small business. In Fiscal Year 1980, the small business share of Federal R&D contract actions over \$10,000 for major R&D agencies ranged from 7.6 percent for the Department of Energy to 2.3 percent for the National Aeronautics and Space Administration.

Federal R&D support has been concentrated in large entities, i.e., large corporations, universities, and non-profit organizations. However, Federal policy is undergoing a change in this area. A bill (S. 881) which would require Federal agencies with large R&D budgets (in excess of \$100 million) to establish Small Business Innovation Research (SBIR) programs was passed by the Senate in

December 1981. These programs require an allocation of not less than one percent of external R&D budgets to small, innovative businesses in three phases of the technical, economic and scientific feasibility valuation process, including the subsequent commercial application stage. Similar legislation is pending in the House.

Additionally, the Department of Health and Human Services announced in April 1981 that it was opening most of its previously closed R&D assistance programs to profitmaker participation. This development could be a potential for considerable benefit for small business.

Taxation. Federal tax policies have generally provided fewer benefits to small firms engaged in innovative activity which require retained earnings to be plowed back into business. Unless there is rapid growth early in the commercialization stage, a small firm cannot afford to meet tax commitments. However, as growth picks up and debts incurred in R&D stages are paid off, small businesses can meet tax obligations. The Economic Recovery Tax Act of 1981 has begun to address this problem. See Appendix E.

Impact of Federal Patent Policies on Small Business. Patents serve several important functions in the innovation process by providing an incentive to the inventor, stimulating risky investments necessary to bring an invention to market, and disclosing important information about inventions and their uses to the public.

The achievement of the objectives of the patent system depends in large part on the strength of protection a patent provides. Today a U.S. patent has less than a 50 percent chance of surviving a court challenge.

The current regulatory approval process for marketing many drugs and chemicals distracts from the protection intended by the patent law's 17-year license. For example, the pharmaceutical industry and the chemical industry are particularly hard hit by this policy. In 1962, two years and \$6 million (or \$15 million in current dollars) were necessary to bring a new medicine from the laboratory to the consumer. It now takes an average of 7-10 years and about \$70 million to complete this process. Some drug products lose up to half their patent life before reaching the public. To remedy this situation Congress is considering legislation to extend the useful life of patents by the amount of regulatory delay. The Patent Extension Act, S. 255, and H.R. 1937, would grant up to 7 additional years to the normal patent term.

Additional problems for patent holders are caused by Federal policy which permits Government contractors to infringe on patent

rights if necessary to meet the terms of the contract. The only remedy available to the patentholder is a suit in the Court of Claims against the Government (not the infringing contractor) for reasonable royalties. The Government cannot be enjoined in such a case. All Federal agencies incorporate this concept in the boilerplate of their contracts.

This policy is particularly troublesome for a small business patentholder because it permits the Government to purchase from the lowest bidder rather than the patentholder, as required by GAO decisions. The patentholder is not only harmed by losing the Federal contract but also by the Government putting a competitor into his business. This section of the patent law was enacted in 1917 to insure that the Government was not enjoined from using memory technology during wartime. However, the law has been used in peacetime to protect the Government's choice of the lowest bidder rather than the patentholder.

Federal policy is undergoing wide-scale and badly needed changes in the patent area. Passage of P.L. 96-517, the Patent Reform Act of 1980, has advanced efforts to remedy many of these disincentives by giving small businesses and non-profit organizations (including universities) a first right of refusal to title to inventions developed with Government funding, and permitting Government agencies (or a central agency) to grant exclusive licenses under Government-owned inventions.

The first right of refusal to title should encourage more small businesses to seek Government-funded research projects. Participation of such small businesses will increase competition in Federal R&D areas now dominated by larger, but less innovative, companies.

While P.L. 96-517 addressed many problems of small business, it created several others by requiring maintenance fees for the full life of a patent. In addition, P.L. 96-517 authorized the Patent and Trademark Office to recoup 50 percent of operating expenses through increased fees. Further, the Commissioner of Patents is seeking an amendment to P.L. 96-517 to permit 100 percent recoupment. The Commissioner indicated that with 100 percent recoupment, the minimal filing and issuance fee will amount to \$800, excluding maintenance fees.

Because of the general need to demonstrate patent protection in order to obtain risk capital for development of small business inventions, increased fees and decreased patent filings could seriously affect small business innovation.

The Role of the Federal Government in International Trade

Introduction. Relatively few small and medium-sized businesses recognize their foreign trade potential. Figures from governmental sources indicate that only 8.3 percent of the Nation's 300,000 manufacturers export regularly and less than 1 percent account for 84 percent of U.S. exports. Small businesses, while representing approximately 40 percent of the GNP, produce only 16 percent of the export sales.²⁰ Entry into foreign trade by small and medium-sized businesses could assist in alleviating the growing trade deficit in this country. This increased participation could, according to the International Trade Administration, U.S. Department of Commerce, help particularly to alleviate the merchandise trade deficit which for 1980 was \$36.4 billion and is estimated at \$38.3 billion for 1981.

Barriers to Small Business Participation in Foreign Trade. Clearly, not all small businesses are equipped to enter the export and foreign trade markets. However, it is possible for hundreds of businesses to expand their enterprises through foreign trade. Because of size and resources, and partially because of complex laws and regulations which govern international trade, small firms have generally been hesitant to export to other nations.

Unfortunately, there are many real and imagined barriers obstructing small business entry in the import/export business. To enter the growing competitive market, a small firm must often enlarge its business, modernize its product, seek new financing, and be prepared to deal with myriads of documents and regulations. In addition, assistance from the Federal Government many times involves substantial paperwork and bureaucratic procedures that are time-consuming, frustrating, and discouraging. One of the major deterrents to owners and managers of small firms interested in entering foreign trade markets has been the lack of a simple procedure to obtain needed information.

In addition, the U.S. Bureau of Customs administers complex laws and regulations that must be followed in order to import products. These laws and regulations govern classification of products, lading, liquidation and payment of duties as well as other requirements. Similarly, exportation of certain products is governed

²⁰It has been estimated that each \$1 billion of exports produces 40,000 new jobs. Since small business accounts for some 86 percent of all new employment in the private sector, it becomes immediately apparent that increased participation in exporting by small business translates directly to increased domestic employment opportunities.

by trade agreements and treaties that too often require international lawyers to interpret.

Exporting Assistance. On October 21, 1980, the Small Business Export Expansion Act of 1980 was enacted. This law declares that a strong export policy is essential to the health of the U.S. economy and that it is in the National interest to promote systematically and consistently and encourage small business participation in international markets.

The Act directs SBA and the Department of Commerce to provide educational and marketing assistance and to improve access to export information and assistance for small businesses. Expansion into export markets often involves additional capital and, accordingly, a revolving line of credit for export purposes has been implemented within SBA. In addition, SBA has established the Office of International Trade which is targeting its efforts on areas that have the manufacturing capacity, export facilities, and product types that will yield significant increases in exports in a short period of time. Fifteen states account for 77 percent of all exports. Obviously, these states represent immediate targets of opportunity for affecting short-term increases in exporting activity.

Key legislation now pending would permit banks to establish export trading companies, authorize the Export-Import Bank to establish a program of guarantees for accounts receivable and inventory held by such export trading companies, and provide exemptions from antitrust laws for export trading companies.

SECTION III. ANTITRUST POLICY AND SMALL BUSINESS

Introduction

The central concern of antitrust enforcement is the protection of the competitive vitality of our economy, a goal that not only benefits consumers, but also makes it possible for enterprising and efficient small businesses to thrive. The Supreme Court has described the Sherman Act as:

a comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade. It rests on the premise that the unrestrained interaction of competitive forces will yield the best allocation of our economic resources, the lowest prices, the highest quality and the greatest material progress, while at the same time providing an

environment conducive to the preservation of our democratic political and social institutions.²¹

The Administration is firmly committed to a program of vigorous enforcement of the antitrust laws, designed to secure the benefits of free and unfettered competition, while avoiding unwarranted and undesirable Government interference with the ability of businesses, large and small, to maximize their productivity and efficiency. Success in this program will enable efficient small businesses to grow and prosper, and will encourage new entrepreneurs to take advantage of opportunities to contribute to economic productivity.

Antitrust Enforcement Policies Affecting Small Businesses

As described earlier in this Report, small businesses are remarkably diverse and participate in all segments of the Nation's economy. For this reason, all antitrust enforcement policies will affect some small businesses. But not all small businesses will be affected by any particular policy and not all small businesses affected by any particular policy will be affected in the same way. Nonetheless, there are certain aspects of antitrust enforcement policy that are of concern to small businesses, and some general observations concerning the impact of those policies are possible. Specifically, it is useful to consider the impact upon small businesses of antitrust enforcement policy with respect to mergers, vertical restraints and price discrimination; the antitrust enforcement agencies' activities as competition advocates within the Government; and the effect of some antitrust immunities on small business.

Mergers. The goals of the Administration's merger enforcement policy are to identify and prevent those transactions that genuinely threaten to harm competition, while at the same time ensuring that potentially beneficial transactions that may contribute to productivity, cost reduction and consumer welfare are not deterred. Careful examination of the potential harms and benefits of proposed mergers is of benefit not only to consumers and society generally, but also to the health and well-being of small business.

Proprietors of small businesses have a strong interest in the existence of a ready market for the sale of their operations, which can be provided through mergers. This can be an important incentive to investment for small entrepreneurs because it enables them to

²¹ Northern Pacific Railway Co. v. United States, 356 U.S. 14 (1958).

recover their investment of time and money should they choose to retire or change fields. Moreover, there comes a point in the life of many successful small businesses when the individuals responsible for its success can best reap the true value of their efforts by merger with another firm able to offer significant production or other advantages. In addition, a more precise examination of mergers, one designed not to interfere with transactions posing no real threat to competition, better protects small businesses for whom merger may become an important option for legitimate tax reasons, such as to achieve some degree of capital liquidity in the estates of the developers and innovators who brought them into existence.

Extremely large mergers during the past year have generated some concern regarding the implications of mergers. Some have argued that this "merger wave" will inevitably overwhelm small businesses. More careful reflection indicates, however, that while some small businesses may suffer competitively at the hands of more efficient firms that have grown through mergers, most small businesses are not directly affected by large firm merger activity.

In short, vigorous enforcement action designed to prevent anticompetitive mergers while avoiding interference with competitively neutral or procompetitive transactions serves to protect valuable flexibility, incentives, and rewards, which play an important role in fostering entrepreneurial enterprises.

Vertical Restraints. Policy in the area of vertical restraints has been the subject of considerable rethinking and analytical refinement over the last two decades. Such restraints include resale price maintenance, which limits price competition; territorial restrictions, which limit sales outside a geographical area; outlet restrictions, which limit distributor sales to non-approved dealers and dealer sales to other dealers; and location restrictions, which limit dealer sales from other than a specified location. It is clear that vertical distribution arrangements, such as territorial restrictions or resale price maintenance, may, under some circumstances, be used as devices to facilitate collusion and thus affect adversely horizontal competition. However, lawyers, economists, and the courts increasingly have come to recognize, in some instances that vertical restrictions can have beneficial effects.

Careful economic analysis demonstrates that an individual firm's choice as to distributional arrangements, such as the granting of franchises or the grouping of goods and services for sale, may simply reflect the firm's judgment about the most efficient way to

structure a marketing effort. Manufacturers, dealers, and consumers may benefit from the resulting strengthening of interbrand competition. New small manufacturing enterprises, for example, benefit particularly from vertical restrictions designed to induce competent and aggressive dealers to spend the time and money necessary to develop a retail market for a fledgling manufacturer's new product. Moreover, retail dealers, many of which may be small businesses, can benefit from vertical restrictions that protect their efforts to provide services from "free riding" by others. "Free riding" refers to those situations where a dealer who does not provide services necessary for the effective marketing of the product (services such as point-of-sale information and demonstration, or post-sale servicing and repair services), and, as a consequence, is able to charge lower prices, "free-rides" on such services provided by others.

Government antitrust actions against vertical restraints and against tying have been rare in recent years because the enforcement authorities have found very few instances in which it seemed likely that the forbidden practice threatened any genuine harm to the interests protected by the antitrust laws. While earlier case law found vertical restrictions to be illegal *per se*,²² recently the Supreme Court has held that intrabrand restraints, other than resale price maintenance, should be judged permissible elements of a marketing system unless clearly shown to have an anticompetitive effect.²³ In specific instances, the trend in case law has led to unsteady and rather legalistic distinctions between price and nonprice restriction. Such distinctions may have little intuitive meaning to the small business owners and as a result, their fortunes may become ever more dependent on the assistance of legal counsel, if it can be afforded. Accordingly, a continuing realistic approach in this area is needed which will be of benefit not only to consumers, but may also directly benefit small businesses.

Price Discrimination. It is a general concern that vigorous enforcement of the Robinson-Patman Act,²⁴ which generally prohibits price discrimination between purchasers of goods of like quantity where the effect of such discrimination "may be to substantially lessen competition or tend to create a monopoly in any line of commerce", is necessary to maintain a thriving small business community. In practice, there is little evidence that the Act's enforcement

²² *United States v. Arnold Schwinn & Co.*, 388 U.S. 365. (1967).

²³ *Continental T.V. Inc. v. GTE Sylvania Inc.*, 433 U.S. 36 (1977).

²⁴ 15 U.S.C. §§13-13b, 21a (1976).

generally has benefited small business. As Professor F. M. Scherer, a former Director of the Bureau of Economics of the Federal Trade Commission, has observed:

[T]he Robinson-Patman Act was passed to help small businesses. Nevertheless, of the 564 companies named in FTC Robinson-Patman complaints between 1961 and 1974, only 36, or 6.4 percent, had annual sales of \$100 million or more at the time of complaint. More than 60 percent had sales below \$5 million. Thus, the brunt of the Commission's enforcement effort fell upon the small businesses Congress sought to protect.²⁵

Price discrimination can encumber competition, as in the case of predatory pricing, and in such instances must be vigorously prosecuted for the sake of small businesses as well as the general public. On the other hand, some differences in price simply reflect competitive responses to market conditions.

Competition Advocacy. In addition to enforcing the antitrust laws, the antitrust enforcement authorities act as strong competition advocates, seeking to promote competition in those sectors of the economy subject to Government regulation. They seek to eliminate unnecessary existing regulation, to inhibit growth of unnecessary new regulation, and to minimize the competitive distortions caused where regulation is necessary by advocating the least anticompetitive form of regulation consistent with the defined regulatory objectives. For example, entry into the trucking industry formerly was made nearly impossible by Federal regulatory policy at the Interstate Commerce Commission, which placed high statutory and administrative burdens on new companies wishing to enter the trucking industry. Since the trucking industry has very low capital requirements, it is particularly well-suited to participation by small businesses. Thus, some 100,000 independent operators in the trucking industry have carried unregulated—but have not themselves regulated—commodities. These 100,000 small businesses, and undoubtedly many others, are potential entrants into the carriage of regulated commodities. The Antitrust Division's competition advocacy and legislative activities in the late 1970's contributed substantially to the eventual passage of the Motor Carrier Act of 1980, which greatly lowered these artificial barriers to entry, bene-

²⁵ F.M. Scherer, *Industrial Market Structure and Economic Performance*, 2nd edition (Chicago, Rand McNally Co.), 1980.

fitting small businesses wishing to engage in transportation of regulated commodities.

The communications industry is another key sector in which antitrust enforcement and competition advocacy efforts have promoted removal of barriers to the participation of small businesses in a dynamic sector of the economy. In particular, the Antitrust Division has participated in numerous proceedings before the Federal Communications Commission (FCC) and in the courts of appeals to promote regulatory initiatives that would remove both regulatory and carrier-imposed barriers to entry. For example, the Division supported elimination of AT&T's foreign attachment tariff in the FCC's 1969 *Carterfone* proceeding, which paved the way for residential and business users to connect their own equipment to the telephone network. When the FCC's certification program for customer-supplied equipment became effective in 1978, an effort also supported by the Division, the so-called interconnect market was potentially opened to full competition. In response, a multitude of firms, both large and small, have entered the business of supplying customers with equipment ranging from phones based on cartoon characters to sophisticated computer terminal equipment. Indeed, once unleashed, the demand for such equipment has been so great that AT&T turned to small businesses to purchase these consumer-oriented telephones.

More recently, of course, the Antitrust Division secured the agreement with AT&T to divest its regulated operations in naturally monopolistic markets, i.e., its local operating company subsidiaries. Thus, AT&T will soon no longer be able to use the market power conferred on it by its regulated local exchange monopolies to frustrate the emergence of competition in the markets for customer premises equipment and intercity service, and in the rapidly growing information services market that AT&T now seeks to enter.

Efforts have also been made to reduce smaller firms' regulatory costs of doing business in markets they have already entered. The Antitrust Division recently supported the Securities and Exchange Commission's proposal to relieve regional exchanges and over-the-counter market makers, often small single-office firms, of the mandatory dissemination of quotations for exchange traded securities, thus reducing transaction costs for those firms. Similarly, the Antitrust Division supported the FCC's proposed low-power television rules and the removal or relaxation of regulations applicable to standard television, such as ascertainment requirements, program

rules, commercial limitations, Fairness Doctrine compliance and maintenance of studio facilities. Finally, the Antitrust Division has encouraged the Depository Institutions Deregulation Committee to permit financial institutions to offer small customers, including small firms, the higher interest rates on deposit instruments or accounts currently offered only to large depositors.

While the Department of Justice's efforts in this regard have been commendable the need continues for antitrust enforcement agencies to examine and eliminate Government regulations that prevent or hinder competition. Such intervention should benefit the small business community.

Antitrust Immunities. Significant sectors of the economy enjoy statutory exemptions from many or all of the individual provisions of the antitrust laws. The Reed-Bulwinkle Act²⁶, Shipping Act of 1916²⁷, McCarran-Ferguson Act²⁸, Capper-Volstead Act²⁹ and Agriculture Marketing Agreements Act³⁰, and several others confer partial or total antitrust immunity upon certain industries. While some of these exemptions may be justified and necessary, small businesses generally suffer as a result of antitrust exemptions because new entry is generally made more difficult. It is, therefore, appropriate for the antitrust enforcement authorities and the Congress to scrutinize the justifications offered for the immunities that exist, and to analyze carefully and skeptically any new immunities that are proposed.

Conclusion

In a variety of areas, rational antitrust enforcement policies directly benefit small business while simultaneously protecting competition, efficiency and consumer welfare. And small businesses in great numbers have and will continue to thrive as the Antitrust Division and the Federal Trade Commission maintain their commitment to challenge vigorously genuine threats to competition, while striving not to interfere with business arrangements fostering productivity, cost reduction, or other efficiencies.

The theme of antitrust enforcement policy is the protection of free and open competition, which means that inefficient busi-

²⁶ 49 U.S.C. §5b (1976).

²⁷ 46 U.S.C. §801 *et seq.* (1976).

²⁸ 15 U.S.C. §1011 *et seq.* (1976).

²⁹ 7 U.S.C. §§291, 292, 455, 621, 622 (1976).

³⁰ 7 U.S.C. §§ 601-624 (1933).

nesses, large or small, will be at a disadvantage. Some, concerned with this result, might wish to see the courts and enforcement authorities apply special antitrust standards to protect small businesses from competition, in deference to social goals other than the promotion of competition and enhancement of efficiency. But this course is not open under the law. As the Supreme Court recognized in *National Society of Professional Engineers v. United States*,³¹ the antitrust laws are designed to foster competition, and arguments that competition is unreasonable are inappropriate to analyses under the antitrust laws.

³¹ 435 U.S. 679 (1978).

APPENDIX A
TABLES AND CHARTS

APPENDIX A—TABLES AND CHARTS

Note: The source of each of the tables is given in parenthesis following its title: SBA = Small Business Administration; IRS = U.S. Department of Treasury, Internal Revenue Service; Census = U.S. Department of Commerce, Bureau of the Census.

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CHAPTER I

TABLE A1.1—Establishments and Enterprises By Industry Divisions and Employment Size of Enterprise, 1978

Industry Division	Total	Less Than 5	5—9	10—19	20—49	50—99	100—249	250—499	500—999	1,000—4,999	5,000—9,999	10,000 or more	Size not Classified
All Industry													
Establishments	4,698,568	2,173,619	842,677	495,435	369,261	166,428	150,250	85,004	68,566	138,306	54,375	154,222	425
Enterprises	3,736,877	2,136,656	771,486	411,994	259,121	84,097	45,522	13,903	6,833	5,390	717	733	425
Agriculture, Forestry, Fisheries													
Establishments	107,961	66,452	21,066	9,651	5,240	1,721	1,299	715	439	778	301	294	5
Enterprises	98,578	65,210	19,505	8,230	3,943	998	478	133	42	30	4	1	4
Mining													
Establishments	40,044	12,391	5,857	5,033	4,263	2,032	1,922	979	791	2,662	512	3,595	7
Enterprises	25,396	12,011	5,103	3,929	2,688	872	488	134	72	66	7	19	7
Construction													
Establishments	577,360	369,295	94,386	51,000	30,716	10,322	7,443	3,605	2,505	3,952	1,409	2,659	68
Enterprises	540,749	365,764	90,055	47,115	26,353	7,048	3,160	722	280	150	19	15	68
Manufacturing													
Establishments	538,198	121,603	76,612	61,370	60,085	31,313	29,590	17,493	15,010	33,041	13,767	78,277	37
Enterprises	337,223	119,266	72,033	55,032	48,947	20,535	12,797	4,291	2,014	1,630	252	389	37
Transportation, Communications, Utilities													
Establishments	189,283	64,420	31,550	22,351	17,401	8,199	7,563	4,350	4,552	11,327	4,710	12,822	38
Enterprises	129,081	63,126	28,721	18,550	11,732	3,690	1,927	553	314	314	54	61	39

CHAPTER I

TABLE A1.1—Continued

Industry Division	Total	Less Than 5	5—9	10—19	20—49	50—99	100—249	250—499	500—999	1,000—4,999	5,000—9,999	10,000 or more	Size not Classified
Wholesale Trade Establishments	470,873	194,527	101,859	64,748	48,554	20,134	16,508	7,658	5,099	7,068	2,140	2,535	43
Enterprises	373,834	189,891	92,070	51,499	28,815	7,288	3,087	708	257	156	11	9	43
Retail Trade Establishments	1,426,979	697,985	290,360	153,207	106,495	41,738	33,976	18,196	14,726	28,862	11,756	29,565	113
Enterprises	1,164,650	685,487	261,351	120,680	70,165	17,849	6,416	1,379	606	440	80	84	113
Fire, Insurance, Real Estate Establishments	392,377	160,306	52,859	34,682	30,695	18,451	20,741	13,736	12,044	25,753	10,052	13,023	35
Enterprises	262,332	156,490	47,337	28,448	17,941	6,216	3,519	1,128	566	524	83	45	35
Services Establishments	955,493	486,640	168,128	93,393	65,812	32,518	31,208	18,272	13,400	24,863	9,728	11,452	79
Enterprises	805,033	479,411	155,310	78,511	48,537	19,601	13,650	4,855	2,682	2,080	207	110	79

Note: Data classifications are comparable to those found in the *Enterprise Statistics* publication of the Bureau of the Census: that is, *both* establishments and enterprises are classified according to the major industry division of their payroll. For example, although General Motors manufactures refrigerators, automobiles and other products, all of its establishments would be classified under Major Group 37, Transportation Equipment.

Source: Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet's Market Identifier file.

CHAPTER I

TABLE A1.2—*Sole Proprietorships, Partnerships, and Corporations, Selected Years*
(Thousands of Businesses¹)

Year	Total	Sole Proprietorships	Partnerships	Corporation
1979	16,192p	12,330	1,300	2,562p
1978	15,629	12,018	1,234	2,377
1977	14,741	11,346	1,153	2,242
1976	14,436	11,358	1,096	2,082
1975	13,979	10,882	1,073	2,024
1974	13,914	10,874	1,062	1,966
1972	12,988	10,173	992	1,813
1970	12,000	9,399	936	1,665
1968	11,672	9,212	918	1,542
1966	11,479	9,087	923	1,469
1964	11,489	9,193	922	1,374
1962	11,383	9,183	932	1,268
1960	11,171	9,090	941	1,141
1958	10,744	8,800	954	990
1956	NA	8,973	NA	886
1954	NA	7,786	NA	723
1953	9,371	7,715	959	698
1952	NA	6,873	NA	672
1950	NA	6,865	NA	629
1948	NA	7,208	NA	594
1947	8,065	6,624	889	552

NA— Not Available

p— Preliminary

¹ Includes farms

Source: Department of the Treasury, Internal Revenue Service, *Statistics of Income, Business Income Tax Returns*, various editions, and Department of Commerce, Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970*.

CHAPTER I

TABLE A1.3—Distribution of Companies with Less than 100 and Less than 500 Employees: Alternative Sources by Industry Divisions, 1977

(Percent)

Industry Division	Percentage of Firms with Less Than			
	100 Employees		500 Employees	
	Small Business Data Base	Enterprise Statistics	Small Business Data Base	Enterprise Statistics
All Industries	98.1	99.3	99.7	99.9
Agriculture, Forestry Fisheries	95.1	NA	100.0	NA
Mining	97.2	97.2	99.4	99.3
Construction	99.3	99.7	99.9	99.9
Manufacturing	94.0	93.8	99.0	98.6
Transportation, Communication, Utilities	97.9	NA	99.5	NA
Wholesale Trade	98.9	98.9	99.9	99.9
Retail Trade	99.3	99.6	99.9	99.9
Finance, Insurance, Real Estate	97.9	NA	99.6	NA
Services ¹	97.2	99.7	99.4	99.9

NA—Not Available

¹ Data for the two series are not strictly comparable because of industry coverage differences.

Source: Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet's Market Identifier file and Department of Commerce, Bureau of the Census, *1977 Enterprise Statistics, General Report on Industrial Organization*, Table 3.

CHAPTER I

TABLE A1.4—*Number of Companies, Employment, Average Sales and Sales Share by Employment Size of Enterprise, 1978*

Item	Total	Less Than 5	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1,000- 4,999	5,000- 9,999	10,000 or more
Number of Companies	3,736,451	2,136,656	771,485	411,994	259,121	84,097	45,522	13,903	6,833	5,390	717	733
Cumulative Percentage of Total Companies		57.2	77.8	88.8	95.7	98.0	99.2	99.6	99.8	99.9	99.95	100.00
Estimated Total Sales ¹ (millions)	5,108,078	292,255	296,790	320,431	432,284	302,011	328,440	217,836	244,800	601,080	302,764	1,769,387
Percentage of Total Sales ¹	100.00	5.7	5.8	6.2	8.5	5.9	6.4	4.2	4.8	11.8	6.0	34.7
Cumulative Percentage of Total Sales ¹		5.7	11.5	17.7	26.2	32.1	38.5	42.7	47.5	59.3	65.3	100.0
Average Sales per Firm ¹ (thousands)	1,374	138	388	778	1,668	3,591	7,215	15,668	35,828	111,518	422,264	2,414,898
Cumulative Percentage of Total Employment		6.0	11.7	18.0	26.7	33.2	40.9	46.3	51.7	63.9	69.6	100.00

¹ Sales data are reported for approximately 70 percent of the total companies.

Source: Small Business Data tabulated by Brookings Institution from Dun and Bradstreet's Market Identifier file.

CHAPTER I

TABLE A1.5—Average Annual Wage By Employment Size of Company and Industry Divisions, 1977
(Dollars)

Employment Size of Company	Industry Division						Selected Services ¹
	All Industries	Minerals	Construction	Manufacturing	Wholesale Trade	Retail Trade	
Total	11,167	15,490	14,140	13,577	12,359	6,990	8,754
1-4	7,506	15,896	9,696	11,064	10,640	4,534	7,280
5-9	8,432	14,899	11,031	11,407	11,590	5,710	8,517
10-19	9,306	14,362	13,029	11,173	12,139	6,111	9,195
20-49	9,614	14,573	14,882	10,976	12,429	6,710	9,095
50-99	10,325	15,283	15,866	10,843	12,629	7,499	8,668
100-249	10,394	15,440	15,787	10,884	12,674	7,323	8,147
250-499	10,398	15,960	15,586	11,017	12,878	6,690	8,110
500-999	10,774	17,589	15,773	11,378	13,151	6,882	8,910
1,000 or more	13,041	15,524	17,244	14,897	12,642	7,798	9,000

¹ The selected services covered by the Economic Census are listed in Appendix C of the 1977 Enterprise Statistics.

Source: Department of Commerce, Bureau of Census, 1977 Enterprise Statistics, General Report on Industrial Organization, Table 3.

CHAPTER I

TABLE A1.6—Gross Fixed Asset Per Production Worker by Employment Size of Company and Major Industry Group, 1976
(Thousands of Dollars)

Employment Size of Company	Major Industry Group									
	Food	Tobacco	Textiles	Apparel	Lumber	Furniture	Paper	Printing, Publishing	Chemicals	Petroleum
All Sizes	32.9	28.6	18.6	3.2	19.6	9.4	63.5	21.2	108.1	236.5
Under 250	25.1	12.8	14.1	3.1	13.9	8.0	21.8	15.0	33.4	49.9
250—499	26.2	13.5	15.2	2.5	12.9	8.1	24.3	19.8	57.9	100.0
500—999	27.8	16.7	16.0	2.6	19.8	7.9	43.2	25.1	84.5	95.8
1,000 or more	38.0	30.5	20.3	3.7	28.8	11.2	71.2	28.6	124.5	283.8
	Rubber	Leather	Stone, Glass	Primary Metals	Fabricated Metals	Machinery except Electrical	Electrical, Electronic Machinery	Transportation Equipment	Instru- ments	Miscellaneous Manufacturing
All Sizes	28.0	4.6	39.2	63.1	20.7	23.8	19.5	23.9	23.7	12.0
Under 250	16.3	6.9	26.8	20.2	15.8	16.0	12.8	14.7	12.4	9.7
250—499	17.5	3.4	27.8	23.9	17.0	18.4	11.4	13.1	10.9	10.0
500—999	19.3	3.8	37.0	29.6	16.1	22.1	14.4	13.2	15.1	12.1
1,000 or more	35.1	3.6	46.5	72.8	25.5	28.2	21.3	25.2	28.2	15.2

Source: Special tabulation of the *Annual Survey of Manufacturers, 1976* prepared for the Small Business Administration Size Standards Branch by the Bureau of the Census.

CHAPTER I

TABLE A1.7—Wages per Production Worker by Employment Size of Company and Major Industry Group, 1976
(Thousands of Dollars)

Employment Size of Company	Major Industry Group									
	Food	Tobacco	Textiles	Apparel	Lumber	Furniture	Paper	Printing, Publishing	Chemicals	Petroleum
All Sizes	10.13	9.93	7.54	5.82	8.87	7.64	12.72	10.71	12.53	15.75
Under 250	8.99	6.56	7.22	5.66	7.91	7.79	9.24	9.39	9.25	11.23
250—499	9.09	5.22	7.04	5.79	8.61	7.31	10.91	10.10	11.12	14.44
500—999	9.01	6.67	7.32	5.30	8.86	6.83	10.79	11.77	10.72	13.33
1,000 or more	10.96	10.41	7.70	6.14	10.24	7.79	12.71	12.29	13.26	16.81
	Rubber	Leather	Stone, Glass	Primary Metals	Fabricated Metals	Machinery except Electrical	Electrical, Electronic Machinery	Transportation Equipment	Instru- ments	Miscellaneous Manufacturing
All Sizes	9.24	6.38	10.85	14.44	11.22	11.88	10.08	14.35	9.99	7.71
Under 250	7.92	7.01	9.55	9.62	9.52	10.67	8.33	9.57	8.76	7.44
250—499	7.96	5.99	9.25	10.64	10.26	10.44	7.97	9.53	7.99	6.89
500—999	8.14	6.23	10.47	12.13	10.42	10.81	8.30	9.77	8.55	7.49
1,000 or more	10.07	6.27	11.67	15.43	12.67	12.67	10.58	14.96	10.57	8.23

Source: Special tabulation of the *Annual Survey of Manufacturers, 1976* prepared for the Small Business Administration Size Standards Branch by the Bureau of the Census.

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TABLE A1.8—Value Added Per Production Worker by Employment Size of Company and Major Industry Group, 1976

[Thousands of Dollars]

Employment Size of Company	Major Industry Group									
	Food	Tobacco	Textiles	Apparel	Lumber	Furniture	Paper	Printing Publishing	Chemicals	Petroleum
All Sizes	49.5	75.3	18.9	15.2	24.8	20.9	46.0	43.9	98.8	131.4
Under 250	39.5	19.1	20.0	15.1	23.0	21.4	30.1	30.1	54.5	67.7
250-499	38.5	18.3	17.0	13.4	20.9	21.8	30.5	42.6	73.3	131.1
500-999	41.8	30.0	16.9	13.1	22.0	17.1	36.2	46.8	75.6	93.9
1,000 or more	56.5	82.3	19.1	16.4	28.4	21.2	47.3	61.2	108.9	146.1
	Rubber	Leather	Stone, Glass	Primary Metals	Fabricated Metals	Machinery except Electrical	Electrical, Electronic Machinery	Transportation Equipment	Instru- ments	Miscellaneous Manufacturing
All Sizes	32.6	16.5	35.4	39.1	11.2	11.9	10.1	14.4	10.0	7.7
Under 250	26.4	20.0	32.6	30.4	28.3	32.3	30.8	30.6	32.4	22.9
250-499	26.3	14.9	29.4	32.9	32.5	38.2	28.2	26.1	36.1	25.1
500-999	24.7	14.3	29.5	33.2	30.9	41.2	33.7	30.9	40.4	26.7
1,000 or more	36.8	16.0	37.8	40.9	39.5	48.8	40.8	48.3	57.5	34.6

Source: Special tabulation of the *Annual Survey of Manufacturers, 1976* prepared for the Small Business Administration, Size Standards Branch by the Bureau of the Census.

CHAPTER I

TABLE A1.9—Sales Per Dollar of Assets by Industry Division and Employment Size of Company, 1979

Industry Division	Employment Size of Company		Ratio Col. 1/ Col. 2
	Under 100 (1)	100 or More (2)	
	(Medians)		
Agriculture, Forestry Fisheries	1.786	2.395	0.745
Mining	1.227	1.016	1.208
Construction	2.528	2.651	0.954
Manufacturing	2.342	1.912	1.225
Transportation, Communication Utilities	1.889	1.550	1.219
Wholesale Trade	2.847	2.780	1.024
Retail Trade	2.411	3.201	0.753
Finance, Insurance Real Estate	0.785	0.712	1.103
Services	1.985	1.896	1.047
	(Means)		
Agriculture, Forestry Fisheries	3.565*	3.202	1.113
Mining	2.854*	1.266	2.254
Construction	4.425*	7.585	0.583
Manufacturing	3.240*	3.132*	1.034
Transportation, Communication, Utilities	3.636	3.015*	1.206
Wholesale Trade	16,076*	4.167*	3.858
Retail Trade	3.585	5.133*	0.698
Finance, Insurance Real Estate	8.546*	5.029	1.699
Services	4,574*	3,384*	1.352

*Indicates coefficient of variation is greater than 5 and, therefore, the number is less reliable.

Source: Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet's Market Identifier file.

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TABLE A1.10—*Business Firms by Industry Division and Legal Form of Organization, 1977*

[Numbers in Thousands]

Industry Division	Total	Sole Proprietorships	Partnerships	Corporations
All industries	14,740.9	11,345.6	1,153.4	2,241.9
Agriculture, Forestry, Fisheries	3,363.8	3,177.2	121.0	65.6
All industries, excluding Agriculture, Forestry Fisheries	11,377.1	8,168.4	1,032.4	2,176.3
Mining	112.4	71.2	22.0	19.2
Construction	1,278.0	994.1	69.2	214.7
Manufacturing	483.2	224.1	28.0	231.1
Transportation, Communication, Utilities	487.3	385.3	16.8	85.2
Wholesale and retail trade	3,130.5	2,264.8	193.3	672.4
Wholesale trade	574.2 ¹	307.2 ¹	29.4 ¹	237.6 ¹
Retail trade	2,459.0 ¹	1,862.4 ¹	163.8 ¹	432.8 ¹
Finance, Insurance, Real Estate	1,804.2	894.9	476.4	432.9
Services	4,045.5	3,302.5	226.6	516.4
Not Allocable	35.7	31.4	—	4.3

¹ Does not include unallocated returns.

Source: Department of the Treasury, Internal Revenue Service, 1977 *Sole Proprietorship Returns*, Table 1.1; 1977 *Partnership Returns*, Table 1, and 1977 *Corporation Income Tax Returns*, Table 1.

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TABLE A1.11—*Proprietorships 1979 and Partnerships 1978 by Business Receipts Size and Business Receipts for Agricultural and Non-Agricultural Industry Categories*

[Business Receipts in Millions of Dollars, Average Receipts in Dollars]

Industry Category	Proprietorships (1979)			Partnerships (1978)		
	Number	Receipts	Average Receipts	Number	Receipts	Average Receipts
	(1)	(2)	(2)/(1)	(4)	(5)	(5)/(4)
All Industries	12,329,982	487,806.9	39,562.7	1,234,799	207,782.3	168,271.9
Less than \$1 million	12,300,527	424,655.4	34,523.4	1,207,966	100,776.1	83,426.3
\$1 million under						
\$2 million	21,441	28,793.8	1,342,931.7	15,265	20,900.0	1,369,145.1
\$2 million and over	8,014	34,357.7	4,287,209.8	11,568	86,106.2	7,443,482.0
Agriculture	3,262,599	98,568.1	30,211.5	126,304	17,797.9	140,913.2
Less than \$1 million	3,258,782	88,621.1	27,194.5	124,057	11,374.5	91,687.7
\$1 million under						
\$2 million	2,395	3,232.3	1,349,603.3	1,233	1,623.7	1,316,869.4
\$2 million and over	1,422	6,714.8	4,722,081.5	1,014	4,799.8	4,733,530.6
Non-Agriculture	9,067,383	389,238.9	42,927.4	1,108,495	189,984.4	171,389.5
Less than \$1 million	9,041,745	336,034.4	37,164.8	1,083,909	89,401.7	82,481.8
\$1 million under						
\$2 million	19,046	25,561.5	1,342,092.8	14,032	19,276.3	1,373,738.6
\$2 million and over	6,592	27,643.0	4,193,416.2	10,554	81,306.4	7,703,846.9

Source: Unpublished tabulations, Department of Treasury, Internal Revenue Service, Statistics Division.

CHAPTER 1

TABLE A1.12—*Enterprise Growth and Decline by Industry Divisions*
1967-72, 1972-77 and 1967-77

[Number in Thousands; Growth in Percent]

Industry Division	Number			Average Annual Rate of Growth (or Decrease)		
	1967	1972	1977	1967-72	1972-77	1967-77
Total ¹	4,395.5	5,010.2	5,589.8	2.65	2.21	2.43
Minerals	20.0	18.2	22.4	-1.87	4.24	1.14
Construction	795.5	893.9	1,190.8	2.36	5.90	4.12
Manufacturing	267.0	265.1	296.1	-.14	2.24	1.04
Wholesale Trade	232.8	328.5	293.5	7.13	-2.23	2.34
Retail Trade	1,683.4	1,845.3	1,776.3	1.85	-.76	.54
Selected Services	1,396.8	1,659.2	2,010.7	3.50	3.92	3.71

¹Excludes agricultural and professional services; almost all of transportation communication and utilities; finance, insurance and real estate; and many zero-employee business activities.

Note: The enterprise is a parent company and all domestic subsidiary firms under its control.

Source: Department of Commerce, Bureau of the Census, 1977 *Enterprise Statistics, General Report on Industrial Organization*, Table 5; 1972 *Enterprise Statistics, Part 1, General Report on Industrial Organization*, Table 3, and 1967 *Enterprise Statistics Part 1, General Report on Industrial Organization*, Table 3-1.

CHAPTER 1

TABLE A1.13—*Distribution of Enterprises by Industry Divisions*
1967, 1972 and 1977

[Percent]

Industry Division	Year		
	1967	1972	1977
Total ¹	100.0	100.0	100.0
Minerals	0.4	0.4	0.4
Construction	18.1	17.8	21.3
Manufacturing	6.1	5.3	5.3
Wholesale Trade	5.3	6.5	5.3
Retail Trade	38.3	36.7	31.8
Selected Services	31.8	33.3	35.9

¹Excludes agricultural and professional services; almost all of transportation communication and utilities; finance, insurance and real estate; and many zero-employee business activities.

Note: The enterprise is a parent company and all domestic subsidiary firms under its control.

Source: Department of Commerce, Bureau of the Census, 1977 *Enterprise Statistics, General Report on Industrial Organization*, Table 5; 1972 *Enterprise Statistics, Part 1, General Report on Industrial Organization*, Table 3, and 1967 *Enterprise Statistics Part 1, General Report on Industrial Organization*, Table 3-1.

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TABLE A1.14—Enterprises with Employees by Industry Divisions, 1977

(Numbers in Thousands)

Industry Division	Number of Enterprises			Ratio	
	County Business Patterns ¹	Enterprise Statistics ²	Small Business Data Base ³	Col. 3/ Col. 1	Col. 3/ Col. 2
Totals	3,508*	2,189*	3,638	1.07	1.66
Mining	20	22	25	1.3	1.1
Construction	440	472	541	1.2	1.2
Manufacturing	267	296	337	1.3	1.1
Transportation, Communication, Utilities	122	NA	129	1.1	NA
Wholesale Trade	274	294	374	1.4	1.3
Retail Trade	957	1,105	1,165	1.2	1.1
Finance, Insurance, Real Estate	309	NA	262	0.9	NA
Services	1,119	4	805	0.7	4

Enterprise Employment by Industry Division, 1977

(Number in Thousands)

Industry Division	Number of Employees			Ratio	
	County Business Patterns ¹	Enterprise Statistics ²	Small Business Data Base ³	Col. 3/ Col. 1	Col. 3/ Col. 2
Totals	64,660*	43,617*	84,835	1.3	1.9
Mining	670	646	1,035	1.5	1.6
Construction	3,569	3,887	4,793	1.3	1.2
Manufacturing	21,608	21,952	29,420	1.4	1.3
Transportation, Communication, Utilities	4,276		5,538	1.3	NA
Wholesale Trade	3,442	3,572	4,366	1.3	1.2
Retail Trade	13,138	13,560	14,824	1.1	1.1
Finance, Insurance, Real Estate	4,376	NA	6,010	1.4	NA
Services	13,581	4	18,849	1.4	4

NA—Not Available

¹—Bureau of the Census, *County Business Patterns* 1977–54, *Enterprise Statistics*, Table 1.

²—Bureau of the Census, 1977 *Enterprise Statistics*, *General Report on Industrial Organization* Table 1.

³—Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet's Market Identification file.

*Data for the three series are not strictly comparable because of industry coverage differences.

⁴—Excludes Agricultural Services, Forestry, Fisheries and unclassified enterprises.

⁵—Excludes Agricultural Services, Forestry and Transportation, Communication and Utilities, Fire Insurance and Real Estate and services which are not listed in Appendix C of the 1977 *Enterprise Statistics*.

Source: Brookings Institution, Candee S. Harris "A Comparison of Employment Data for Several Business Data Sources: County Business Patterns, Unemployment Insurance, and the Brookings' U.S. Establishment and Enterprise Microdata File." Draft, October 1981.

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TABLE A1.15—*Enterprises with Under 5 Employees: Alternative Sources by Industry Divisions, 1977*

(Percent and Rank)

Industry	Small Business Data Base		Enterprise Statistics	
	Percent	Rank	Percent	Rank
Agricultural Services, Forestry, Fisheries	64.2	2	NA	NA
Mining	48.2	8	59.2	4
Construction	67.6	1	86.6	2
Manufacturing	35.8	9	45.4	6
Transportation, Communication Utilities	49.5	7	NA	NA
Wholesale Trade	50.8	6	48.6	5
Retail Trade	59.1	5	75.7	3
Finance, Insurance, Real Estate	61.0	3	NA	NA
Services ¹	59.3	4	89.6	1

NA Not available

¹ Data for the two series are not strictly comparable because of industry coverage differences.

Sources: Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet's Market Identifier file and Department of Commerce, Bureau of the Census, *1977 Enterprise Statistics, General Report on Industrial Organization*, Table 3.

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TABLE A1.16—*Establishments in Selected Data Series by Industry Divisions*

(number)

Industry Division	County Business Patterns (1977)	Small Business Data Base (1978)	R.L. Polk & Co. (1978)
Total	4,292,132	4,698,569	6,468,902
Agriculture, Forestry Fisheries	44,997	107,961	67,489
Mining	27,755	40,044	16,223
Construction	439,381	577,360	432,969
Manufacturing	327,850	538,198	336,201
Transportation, Communication, Utilities	166,465	189,283	164,181
Wholesale Trade	375,077	470,873	468,372
Retail Trade	1,263,377	1,426,979	1,733,127
Total, Wholesale and Retail	1,638,454	1,897,852	2,201,499
Finance, Insurance, Real Estate	413,128	392,377	472,511
Services	1,233,652	956,493	2,757,026
Government	—	—	20,803

Note: Detail may not add to total due to unallocated establishments.

Source: Department of Commerce Bureau of the Census, *County Business Patterns*, U.S. Summary Table 1B, issued 10/79; Brookings U.S. Establishment and Enterprise Microdata, unpublished data, 1978, R.L. Polk and Co., "Polk Catalog of Miling and Prospect Lists."

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TABLE A1.17—*Sole Proprietorships by Size of Business Receipts, 1977*

(Number)

Size of Business Receipts	All Industries	Other Non-Agricultural Industries	Agriculture Forestry, and Fishing Industries
Total	11,345,636	8,168,439	3,177,180
Under \$2,500	3,286,039	2,265,240	1,020,799
\$2,500 under \$5,000	1,488,848	1,036,276	452,572
\$5,000 under \$10,000	1,480,824	1,067,942	412,882
\$10,000 under \$25,000	1,987,109	1,416,628	570,481
\$25,000 under \$50,000	1,294,447	936,361	358,086
\$50,000 under \$100,000	946,765	710,158	236,607
\$100,000 under \$200,000	526,888	437,748	89,120
\$200,000 under \$500,000	260,750	232,742	28,008
\$500,000 under \$1,000,000	53,111	48,330	4,781
\$1,000,000 under \$2,000,000	15,606	12,546	3,060
\$2,000,000 under \$5,000,000	4,378	3,755	623
\$5,000,000 under \$10,000,000	663	547	119
\$10,000,000 or more	208	166	42

Source: Department of the Treasury, Internal Revenue Service, 1977. *Sole Proprietorship Returns*, Table 1.3.

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TABLE A1.18—*Partnerships by Size of Business Receipts, 1977*

(Number)

Size of Business Receipts	All Industries	Other Non-Agricultural Industries	Agriculture, Forestry and Fishing Industries
Total	1,153,398	1,032,356	121,042
No Receipts Reported	77,377	68,002	9,375
\$1 under \$5,000	206,989	191,040	15,949
\$5,000 under \$10,000	105,860	96,137	9,723
\$10,000 under \$25,000	177,848	159,683	18,165
\$25,000 under \$50,000	148,547	131,200	17,347
\$50,000 under \$100,000	153,108	133,875	19,233
\$100,000 under \$200,000	125,761	108,531	17,230
\$200,000 under \$500,000	102,771	92,948	9,823
\$500,000 under \$1,000,000	32,146	29,494	2,652
\$1,000,000 under \$2,000,000	13,769	12,691	1,078
\$2,000,000 under \$5,000,000	6,440	6,088	352
\$5,000,000 under \$10,000,000	1,719	1,658	61
\$10,000,000 or more	1,063	1,009	54

Source: Department of the Treasury, Internal Revenue Service, 1977 *Partnership Returns*, Table 3.

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TABLE A1.19—Corporations by Size of Business Receipts, 1977

(Number)

Size of Business Receipts	All Industries	Other Industries	Agriculture, Forestry, & Fishing
Total	2,241,887	2,176,293	65,594
Under \$25,000	483,805	470,202	13,603
25,000 under 50,000	192,030	183,630	8,400
50,000 under 100,000	269,393	260,860	8,533
100,000 under 500,000	268,949	743,425	25,524
500,000 under 1,000,000	213,479	208,353	5,126
1,000,000 under 5,000,000	245,598	241,992	3,606
5,000,000 under 10,000,000	37,020	36,547	473
10,000,000 under 50,000,000	25,958	{ 28,259 }	{ 314 }
50,000,000 under 100,000,000	2,610		
100,000,000 under 250,000,000	1,640	1,632	8
250,000,000 under 500,000,000	615	{ 1,398 }	{ 7 }
500,000,000 or more	790		

Source: Department of the Treasury, Internal Revenue Service, 1977 Corporation Income Tax Returns, Table 7.

CHAPTER I

TABLE A1.20—Business Receipts by Industry Divisions and Legal Form of Organization, 1977

(Millions of Dollars)

Industry Division	Total	Sole Proprietorships	Partnerships	Corporations
All industries	4,384,345	393,872	176,548	3,813,925
Agriculture, forestry and fishing	122,109	74,641	13,537	33,931
All industries, excluding Agriculture, forestry and fishing	4,262,236	319,231	163,011	3,779,994
Mining	103,006	4,587	5,866	92,553
Construction	233,727	42,752	14,230	176,745
Manufacturing	1,610,163	10,024	8,798	1,591,341
Transportation, Communication, Utilities	336,130	13,879	3,818	318,433
Wholesale and Retail Trade	1,424,725	160,494	48,616	1,215,615
Wholesale trade	675,388 ¹	33,499 ¹	16,624 ¹	625,265 ¹
Retail trade	744,541 ¹	123,594 ¹	31,983 ¹	588,964 ¹
Finance, Insurance Real Estate	270,078	19,320	43,895	206,863
Services	281,168	67,791	37,788	175,589
Not allocable	3,237	383	—	2,854

¹ Does not include unallocated returns.

Note: Components may not add to total because of rounding.

Source: Department of Treasury, Internal Revenue Service, 1977 Sole Proprietorship Returns, Table 1.1; 1977 Partnership Returns, Table 1 and 1977 Corporation Revenue Tax Returns, Table 1.

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TABLE A1.21—*Distribution of Sales in Companies with Less than 100 and Less than 500 Employees by Industry Divisions, 1977*

(Percent)

Industry Division	Percentage of Firms with Less than			
	100 Employees		500 Employees	
	Small Business Data Base	Enterprise Statistics	Small Business Data Base	Enterprise Statistics
All Industries	32.1	40.8	42.7	52.6
Agriculture, Forestry Fisheries	62.0	NA	63.9	NA
Mining	4.1	24.2	6.0	36.9
Construction	68.9	69.3	82.7	82.9
Manufacturing	12.3	12.0	21.7	22.5
Transportation, Communication, Utilities	15.5	NA	21.6	NA
Wholesale Trade	59.1	68.6	74.5	85.0
Retail Trade	56.5	55.7	65.5	64.6
Finance Insurance, Real Estate	22.2	NA	33.5	NA
Services	44.8	64.5	62.1	77.3

NA—Not available

Note: Sales data from the Dun and Bradstreet Based Small Business Data Base exclude subsidiaries and branches. A dash indicates lack of coverage in the industry. The mining and service industries in the above data series are not fully comparable.

Sources: Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet's Market Identifier file and Department of Commerce, Bureau of the Census, 1977 *Enterprise Statistics, General Report on Industrial Organization*, Table 3.

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TABLE A1.22—Sales of Companies by Employment Size and Industry Divisions, 1977

[Millions of Dollars and Percent]

Industry Division														
Employment Size of Company	All Industries Millions Cum. %		Minerals Millions Cum. %		Construction Millions Cum. %		Manufacturing Millions Cum. %		Wholesale Trade Millions Cum. %		Retail Trade Millions Cum. %		Selected Services ¹ Millions Cum. %	
Total	3,324,551		59,782		239,374		1,409,465		709,773		729,617		176,540	
No Paid Employees	54,931	1.7	— —		16,178	6.8	— —		— —		23,468	3.2	15,285	8.7
0 to reporting period ²	27,272	2.5	231	0.4	4,425	8.6	689	—	6,951	1.0	11,025	4.7	3,951	10.9
1-4	197,062	8.4	1,673	3.2	28,345	20.4	10,545	0.8	65,052	10.2	66,712	13.8	24,735	24.9
5-9	212,117	14.8	1,548	5.8	26,240	31.4	14,167	1.8	86,230	22.3	65,027	22.7	18,905	35.6
10-19	262,599	22.7	2,609	10.2	30,408	44.1	26,500	3.7	110,143	37.8	74,210	32.9	18,729	46.2
20-49	364,037	33.6	4,914	18.4	37,718	59.9	58,739	7.9	140,525	57.6	102,419	46.9	19,722	57.4
50-99	238,630	40.8	3,487	24.2	22,454	69.3	58,370	12.0	77,907	68.6	63,940	55.7	12,472	64.5
100-249	244,750	48.2	4,214	31.2	21,229	78.2	84,226	18.0	75,831	79.3	45,287	61.9	13,963	72.4
250-499	146,714	52.6	3,401	36.9	11,240	82.9	63,680	22.5	40,347	85.0	19,365	64.6	8,681	77.3
500-999	142,623	56.9	3,426	42.6	7,716	86.1	66,935	27.2	39,055	90.5	17,992	67.1	7,499	81.5
1,000 and over	1,433,816	100.0 %	34,279	100.0 %	33,421	100.0 %	1,025,614	100.0 %	67,732	100.0 %	240,172	100.0 %	32,598	100.0 %

¹ Selected services covered by the economic censuses are listed in Appendix C of the 1977 Enterprise Statistics.² Companies which reported annual payroll but did not report any employee on their payroll during specific pay periods in 1977.

Source: Department of Commerce, Bureau of the Census, 1977 Enterprise Statistics, General Report on Industrial Organization, Table 3.

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TABLE A1.23—*Income Before Taxes as a Percent of Total Business Receipts by Asset Size of Firm, 1973-74*
(Assets in Thousand Dollars)

Industry Division	Size of Total Assets											
	All Asset Sizes	1 under 100	100 under 250	250 under 500	500 under 1,000	1,000 under 5,000	5,000 under 10,000	10,000 under 25,000	25,000 under 50,000	50,000 under 100,000	100,000 under 250,000	250,000 or more
All Industries	5.10	0.90	2.59	2.77	2.84	3.38	4.14	4.70	4.85	5.03	6.20	7.32
Agriculture Forestry, Fishing	4.18	3.53	4.62	4.18	5.76	3.09	5.05	3.09	3.68	8.87	7.39	
Mining	23.47	-2.04	5.19	6.01	3.86	5.10	5.03	2.96	4.87	5.49	7.29	39.88
Construction	1.74	-0.42	1.71	1.70	1.74	2.03	1.71	1.50	2.12	-0.34	2.27	6.25
Manufacturing	6.33	0.37	2.24	3.05	3.40	4.54	5.09	5.52	5.83	5.63	7.08	7.28
Transportation, Communications, Utilities	4.93	-0.99	2.59	2.99	3.47	3.54	4.94	5.17	4.94	3.70	4.17	5.58
Wholesale Trade	3.12	1.38	2.34	2.73	2.90	3.49	3.45	3.56	3.32	3.94	3.78	2.27
Retail Trade	1.95	0.51	2.24	1.97	1.88	1.92	2.47	1.62	2.07	1.98	1.87	2.42
Finance Insurance, Real Estate	12.25	5.36	15.46	18.90	15.00	10.42	11.79	18.11	14.52	15.07	17.60	11.32
Services	2.76	1.05	2.40	3.08	2.93	2.89	4.80	4.40	4.32	4.32	5.10	2.04

Note: Data are for firms with and without income.

*Omitted due to potential disclosure of corporate identity.

Source: Department of the Treasury, Internal Revenue Service, *Corporation Income Tax Returns, 1973-74*.

CHAPTER I

TABLE A1.24—Average and Cumulative Share of Sales by Industry Divisions and Employment Size of Enterprise, 1978
(Sales, Thousands of Dollars; Sales Share, Percentage)

Industry Division	Employment Size of Enterprise											
	Total	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000-4999	5000-9999	10,000 and over
Total												
All Industries												
Average Sales	1,374	138	385	778	1,668	3,591	7,215	15,668	35,827	11,518	422,264	2,413,898
Cum. Share	—	5.7	11.5	17.7	26.2	32.1	38.5	42.7	47.5	59.3	65.3	100.0
Agriculture, Forestry, Fishing												
Average Sales	603	140	346	626	1,451	3,184	5,284	12,781	30,159	85,903	345,333	2,536,666
Cum. Share	—	20.0	33.9	44.5	55.9	62.0	66.7	69.7	71.9	78.7	81.3	100.0
Mining												
Average Sales	31,666	230	515	994	1,731	3,796	9,407	19,202	53,840	263,892	466,363	8,736,290
Cum. Share	—	0.6	1.2	2.1	3.3	4.1	5.3	6.0	6.6	12.1	13.7	100.0
Construction												
Average Sales	851	148	358	703	1,548	3,574	7,499	17,391	32,686	89,965	384,364	1,125,384
Cum. Share	—	19.7	31.7	43.9	54.3	68.9	77.9	82.6	85.8	90.9	93.7	100.0
Manufacturing												
Average Sales	17,110	113	275	579	1,281	2,812	6,447	14,657	30,368	102,136	396,537	2,335,955
Cum. Share	—	0.9	2.2	4.3	8.4	12.3	17.7	21.7	25.3	35.2	42.1	100.0
Transportation, Communication, Utilities												
Average Sales	36,059	123	382	530	1,315	3,169	7,322	17,175	38,678	185,299	718,406	2,333,093
Cum. Sales	—	2.1	5.0	8.1	12.3	15.5	19.1	21.6	24.4	39.9	53.5	100.0

TABLE A1.24—Continued

Industry Division	Total	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000-4999	5000-9999	10,000 and over
Wholesale Trade												
Average Sales	2,908	316	886	1,743	3,817	8,650	20,527	50,537	163,898	359,715	939,214	2,916,384
Cum. Share	—	8.4	20.1	33.3	49.6	59.1	68.7	74.5	81.9	92.2	94.2	100.0
Retail Trade												
Average Sales	1,340	107	288	615	1,463	3,746	7,263	13,509	25,144	93,393	320,921	2,151,693
Cum. Share	—	10.5	21.3	32.1	46.9	56.5	62.9	65.5	67.2	72.3	75.9	100.0
Finance, Insurance, Real Estate												
Average Sales	6,582	349	876	1,693	3,569	8,128	14,156	26,869	51,293	159,631	426,948	2,052,200
Cum. Share	—	4.2	8.3	12.4	17.6	22.2	28.2	33.5	39.6	59.8	68.7	100.0
Services												
Average Sales	818	82	235	441	826	1,462	2,863	6,953	13,444	38,801	160,997	471,903
Cum. Share	—	9.7	19.0	27.8	37.9	44.8	54.1	62.1	68.5	83.4	89.0	100.0

Note: Averages exclude subsidiaries and firms with unreported sales.

Source: Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet's Market Identifier File.

CHAPTER I

TABLE A1.25—*Companies, Employees, Employment
Per Company and Relative Concentration Per State **
[Number and Percent]

Federal Regions	Companies		Employment		Ratio:	
	Number	Percent	Number	Per Company	Percent of (3)	Col. 5/ Col. 2
	(1)	(2)	(3)	(4)	(5)	
United States	3,623,468	100.0	80,704,455	22.3	100.0	1.00
Region I:						
Total	209,900	5.8	5,574,538	26.5	6.9	1.19
Maine	16,809	0.5	229,169	13.6	0.3	0.60
New Hampshire	16,112	0.4	245,583	15.2	0.3	0.75
Connecticut	54,608	1.5	2,567,808	47.0	3.2	2.13
Vermont	9,170	0.3	98,490	10.7	0.1	0.33
Rhode Island	18,077	0.5	355,212	19.7	0.4	0.80
Massachusetts	95,124	2.6	2,078,276	21.9	2.6	1.00
Region II:						
Total	435,441	12.0	15,133,868	34.8	18.7	1.56
New York	308,325	8.5	12,379,358	40.2	15.3	1.80
New Jersey	127,116	3.5	2,754,510	21.7	3.4	0.97
Puerto Rico	NA	NA	NA	NA	NA	NA
Region III:						
Total	348,193	9.6	8,315,751	23.9	10.3	1.07
Delaware	8,327	0.2	427,770	51.4	0.5	2.50
District of Columbia	12,872	0.4	1,277,732	99.3	1.6	4.00
Maryland	56,746	1.6	944,086	16.7	1.2	0.75
Pennsylvania	176,886	4.9	4,151,446	23.5	5.1	1.04
Virginia	69,965	1.9	1,195,721	17.1	1.5	0.79
West Virginia	23,397	0.6	318,996	13.6	0.4	0.67
Region IV:						
Total	567,926	15.9	8,892,303	15.7	11.1	0.70
Alabama	47,567	1.3	712,289	15.0	0.9	0.69
Florida	171,684	4.8	2,212,585	12.9	2.7	0.56
Georgia	85,231	2.4	1,459,307	17.1	1.8	0.75
Kentucky	51,052	1.4	709,626	13.9	0.9	0.64
Mississippi	31,295	0.9	398,314	12.7	0.5	0.56
North Carolina	78,290	2.2	1,585,379	20.3	2.0	0.91
South Carolina	39,170	1.1	624,025	15.9	0.8	0.73
Tennessee	63,637	1.8	1,190,778	18.7	1.5	0.83
Region V:						
Total	708,925	19.5	19,021,417	26.8	23.4	1.21
Illinois	189,979	5.3	5,762,570	30.3	7.0	1.32
Indiana	77,788	2.1	1,295,154	16.7	1.6	0.76
Michigan	135,350	3.7	4,415,386	32.6	5.5	1.49
Minnesota	72,833	2.0	1,710,915	23.5	2.1	1.05
Ohio	156,925	4.3	4,393,702	28.0	5.4	1.26
Wisconsin	76,050	2.1	1,443,690	19.0	1.8	0.86

* Relative concentration is defined as the percentage of employees in a state relative to the percentage of companies in that state. An equal representation of each would therefore have a value of 1.00.

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TABLE A1.25—Continued

Federal Regions	Companies		Employment		Ratio	
	Number	Percent	Number	Per Company	Percent	Col. 5/ Col. 2
	(1)	(2)	(3)	(4)	(5)	
Region VI:						
Total	403,791	11.1	6,576,760	16.3	8.2	0.74
Arkansas	35,792	1.0	409,781	11.5	0.5	0.50
Louisiana	60,987	1.7	921,714	15.1	1.1	0.65
New Mexico	19,383	0.5	219,448	11.3	0.3	0.60
Oklahoma	54,266	1.5	702,810	13.0	0.9	0.60
Texas	233,363	6.4	4,323,007	18.5	5.4	0.84
Region VII:						
Total	211,833	5.8	3,576,014	16.9	4.4	0.76
Iowa	51,690	1.4	659,731	12.8	0.8	0.57
Kansas	44,398	1.2	641,214	14.4	0.8	0.67
Missouri	86,374	2.4	1,849,724	21.4	2.3	0.96
Nebraska	29,371	0.8	425,345	14.5	0.5	0.63
Region VIII:						
Total	126,974	3.5	1,595,856	12.6	2.1	0.60
Colorado	51,932	1.4	747,215	14.4	0.9	0.64
Montana	17,168	0.5	148,096	8.6	0.2	0.40
North Dakota	12,309	0.3	132,255	10.7	0.3	1.00
South Dakota	12,747	0.4	143,133	11.2	0.2	0.50
Utah	23,364	0.6	333,315	14.3	0.4	0.67
Wyoming	9,454	0.3	91,842	9.7	0.1	0.33
Region IX:						
Total	464,320	12.8	9,868,483	21.3	12.2	0.95
Arizona	37,524	1.0	589,543	15.7	0.7	0.70
California	397,102	11.0	8,817,945	22.2	10.9	0.99
Hawaii	16,267	0.4	258,282	15.9	0.3	0.75
Nevada	13,427	0.1	202,713	15.1	0.3	0.75
Region X:						
Total	146,165	4.0	2,149,463	14.7	2.7	0.68
Alaska	7,829	0.2	69,077	8.8	0.1	0.50
Idaho	16,243	0.4	236,516	14.6	0.3	0.75
Oregon	50,737	1.4	722,451	14.2	0.9	0.64
Washington	71,356	2.0	1,121,419	15.7	1.4	0.70

NA—Not available

Source: Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet's Market Identifier File. The number of companies and employees were tabulated prior to imputations of missing branches and subsidiaries. Totals are therefore lower than in those tables in which branch and subsidiary imputations have already occurred.

CHAPTER I

TABLE A1.26—Companies by Employment Size and of Company and Industry Division, 1977
[Number and Percent]

Employment Size of Company	All Industries		Minerals		Construction		Manufacturing		Wholesale Trade		Retail Trade		Selected Services ¹	
	No.	Cum.%	No.	Cum.%	No.	Cum.%	No.	Cum.%	No.	Cum.%	No.	Cum.%	No.	Cum.%
Total	5,589,806		22,358		1,190,789		296,146		293,522		1,776,253		2,010,738	
No Paid Employees	2,705,346	48.4	—	—	718,782	60.4	—	—	—	—	671,321	37.8	1,315,243	65.4
0 for Reporting Period ²	296,526	53.7	4,408	19.7	61,309	65.5	33,247	11.2	17,913	6.1	108,998	43.9	70,651	68.9
1-4	1,466,061	79.9	8,840	59.2	250,784	86.6	101,330	45.4	124,755	48.6	564,763	75.7	415,539	89.6
5-9	529,858	89.4	2,863	72.0	85,476	93.8	43,869	60.2	65,745	71.0	219,206	88.0	112,699	95.2
10-19	312,714	95.0	2,712	84.1	44,118	97.5	41,871	74.3	47,274	87.1	121,788	94.9	54,951	97.9
20-49	187,004	98.3	2,187	93.9	21,889	99.3	40,364	87.9	27,996	96.6	66,926	98.7	27,642	99.3
50-99	53,841	99.3	744	97.2	5,309	99.7	17,612	93.8	6,462	98.8	15,823	99.6	7,891	99.7
100-249	25,372	99.8	368	98.8	2,288	99.9	10,702	97.4	2,529	99.7	5,254	99.9	4,231	99.9
250-499	6,909	99.9	113	99.3	507	99.9	3,468	98.6	545	99.9	1,128	99.9	1,148	99.9
500 or More	6,175	100.0	123	100.0	327	100.0	3,633	100.0	303	100.0	1,046	100.0	743	100.0

¹ Selected services covered by the Economic Censuses are listed in Appendix C of the 1977 Enterprise Statistics.² Companies which reported annual payroll but did not report any employees on their payroll during specified pay periods in 1977.

Source: Department of Commerce, Bureau of the Census, 1977 Enterprise Statistics, General Report on Industrial Organization, Table 3.

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TABLE A1.27—*Establishments per Company by Employment Size of Company and Industry Divisions, 1977*

[Number]

Employment Size of Company	All Industries	Minerals	Construction	Manufacturing	Wholesale Trade	Retail Trade	Selected Services ¹
Total	1.114	1.369	1.009	1.639	1.220	1.162	1.037
No. Paid Employees	1.000	—	1.000	—	—	—	1.000
0 for reporting Period ²	1.004	1.004	1.000	1.003	1.008	1.005	1.004
1-4	1.005	1.005	1.000	1.001	1.008	1.004	1.004
5-9	1.034	1.040	1.002	1.007	1.053	1.040	1.039
10-19	1.120	1.084	1.012	1.021	1.175	1.158	1.150
20-49	1.337	1.274	1.060	1.085	1.543	1.464	1.412
50-99	1.892	1.801	1.272	1.294	2.552	2.452	1.992
100-249	3.275	2.984	1.801	1.926	4.644	6.282	2.961
250-499	6.938	5.876	3.379	3.616	9.906	18.393	5.983
500-999	13.833	9.333	7.076	7.009	20.216	38.301	13.323
1,000 or more	105.200	67.227	24.324	78.470	48.544	249.310	69.583

¹ Selected services covered by the economic censuses are listed in Appendix C of the 1977 *Enterprise Statistics*.² Companies which reported annual payroll but did not report any employees on their payroll during specified pay periods in 1977.Source: Department of Commerce, Bureau of the Census, 1977 *Enterprise Statistics, General Report on Industrial Organization*, Table 3.

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TABLE A1.28—*Employment by Employment Size of Company and Industry Divisions, 1977*
[Number and Percent]

Employment Size of Company	Industry Division													
	All Industries		Minerals		Construction		Manufacturing		Wholesale Trade		Retail Trade		Selected Services ¹	
	No. ¹	Cum. %	No.	Cum. %	No.	Cum. %	No.	Cum. %	No.	Cum. %	No.	Cum. %	No.	Cum. %
Total	49,775,765		645,975		3,887,221		21,952,260		3,571,992		13,560,387		6,157,930	
1-4	3,094,037	6.2	16,671	2.6	534,863	13.8	209,502	1.0	279,616	7.8	1,229,640	9.1	823,745	13.4
5-9	3,467,803	13.2	19,465	5.6	556,775	28.1	294,003	2.3	436,914	20.0	1,430,245	20.0	730,101	25.3
10-19	4,182,241	21.6	37,391	11.4	585,982	43.2	574,155	4.9	635,785	37.8	1,621,223	31.6	727,705	37.1
20-49	5,573,866	32.8	66,837	21.7	643,246	59.7	1,254,048	10.6	821,463	60.8	1,973,076	46.2	815,196	50.3
50-99	3,655,212	40.1	50,710	30.0	358,563	68.9	1,217,247	16.1	435,585	73.0	1,053,964	54.0	539,143	59.1
100-249	3,790,138	47.7	56,025	38.7	338,761	77.6	1,627,676	23.5	373,437	83.5	758,682	59.6	635,557	69.4
250-499	2,366,280	52.5	39,287	44.8	172,973	82.0	1,192,418	28.9	187,769	88.8	385,801	62.4	368,032	75.5
500-999	2,088,287	56.7	32,861	49.9	125,275	85.2	1,166,163	34.2	131,852	92.5	339,419	64.9	292,717	80.5
1,000 or more	21,557,901	100.0	326,728	100.0	570,783	100.0	14,416,748	100.0	269,571	100.0	4,768,337	100.0	1,205,734	100.0

¹ Selected services covered by the Economic Censuses are listed in Appendix C of the 1977 Enterprise Statistics.

Source: Department of Commerce, Bureau of the Census, 1977 Enterprise Statistics, General Report on Industrial Organization, Table 3.

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TABLE A1.29—Payrolls by Employment Size of Company and Industry Divisions, 1977

[Millions of Dollars and Percent]

Employment Size of Company	Industry Division													
	All Industries		Minerals		Construction		Manufacturing		Wholesale Trade		Retail Trade		Selected Services¹	
	Millions	Cum. %	Millions	Cum. %	Millions	Cum. %	Millions	Cum. %	Millions	Cum. %	Millions	Cum. %	Millions	Cum. %
Total	555,848		10,006		54,964		298,043		44,145		94,782		53,909	
0 for Reporting Period²	3,921	0.7	23	3.2	875	1.6	104	—	384	0.9	1,405	1.5	1,131	2.1
1—4	23,224	4.9	265	2.8	5,186	11.0	2,318	0.8	2,975	7.6	6,484	8.3	5,997	11.3
5—9	29,239	10.8	290	5.7	6,142	22.2	3,357	1.9	5,064	19.1	8,167	16.9	6,218	22.8
10—19	38,921	17.8	537	11.1	7,635	36.1	6,415	4.1	7,718	36.6	9,926	27.4	6,691	35.2
20—49	55,173	27.7	974	20.8	9,573	53.5	13,764	8.7	10,210	59.7	13,239	41.4	7,414	50.0
50—99	37,740	34.5	775	28.5	5,689	63.9	13,198	13.1	5,501	72.2	7,904	49.7	4,673	58.7
100—249	39,393	41.6	865	37.1	5,348	73.6	17,715	19.0	4,733	82.9	5,556	55.6	5,178	68.3
250—499	24,605	46.0	627	43.4	2,696	78.5	13,137	23.4	2,418	88.4	2,581	58.3	3,147	74.1
500—999	22,500	50.0	578	49.2	1,976	82.1	13,268	27.9	1,734	92.3	2,336	60.8	2,608	78.9
1,000 or more	281,132	100.0	5,072	100.0	9,844	100.0	214,767	100.0	3,408	100.0	37,184	100.0	10,852	100.0

¹ Selected services covered by the Economic Censuses are listed in Appendix C of the 1977 Enterprise Statistics.² Companies which reported annual payroll but did not report any employees on their payroll during specified pay periods in 1977.

Source: Department of Commerce, Bureau of the Census, 1977 Enterprise Statistics, General Report on Industrial Organization, Table 3.

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TABLE A1.30—Distribution of Employment in Companies with Less than 100 and Less than 500 Employees by Industry Divisions, 1977

(Percent)

Industry Division	Percentage of Firms with Less Than			
	100 Employees		500 Employees	
	Small Business Data Base	Enterprise Statistics	Small Business Data Base	Enterprise Statistics
All Industries	33.8	40.1	46.8	52.5
Agriculture, Forestry, Fisheries	66.8	NA	76.6	NA
Mining	13.8	30.0	19.7	44.8
Construction	70.0	68.9	83.7	82.0
Manufacturing	16.1	16.1	28.3	28.9
Transportation, Communication, Utilities	18.1	NA	24.5	NA
Wholesale Trade	68.5	73.0	83.0	88.8
Retail Trade	56.8	54.0	65.8	62.4
Finance, Insurance, Real Estate	31.8	NA	46.3	NA
Services	32.0	59.1	51.3	75.7

NA—Not Available

Note: Mining and Service sectors in the 2 sources are not comparable.

Sources: Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet's Market Identifier File and, Department of Commerce, Bureau of the Census, 1977 *Enterprise Statistics, General Report on Industrial Organization*, Table 3.

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TABLE A1.31—Company Profits After Tax as a Percentage of Net Sales By Major Industry Groups and Selected Employment Size Classes, 1978

SIC	Major Groups	Employment Size Class		
		20—99	100—499	500—999
1	Farms-Crops	8.03	2.72	6.10
2	Farms-Livestock	4.75	2.54	-
7	Agricultural Services	8.20	12.72	-
10	Metal Mining	-.07	-	7.13
11	Anthracite Mining	0.45	2.06	5.46
12	Bituminous Coal	7.78	4.93	-
13	Oil, Gas Extraction	11.94	12.31	10.91
14	Nonmetallic Mining	7.38	8.37	-
15	General Contractors	3.02	2.57	2.81
16	Heavy Construction	4.23	3.12	9.59
17	Special Trade Construction	3.41	2.53	2.20
20	Food Products	2.70	3.33	2.90
22	Textile Mill Products	2.73	1.30	4.35
23	Apparel and Other Textile Products	2.90	2.68	3.70
24	Lumber, Wood Products	4.73	6.10	5.31
25	Furniture, Fixtures	3.51	3.55	4.66
26	Paper Products	3.64	2.20	5.80
27	Printing Publishing	37.18	7.23	9.85
28	Chemicals	5.81	9.01	5.43
29	Petroleum Products	4.78	5.01	5.33
30	Rubber Products	4.06	3.68	3.59

TABLE A1.31—Continued

SIC	Major Groups	Employment Size Class		
		20-99	100-499	500-999
31	Leather Products	3.55	2.79	4.66
32	Stone, Clay, Glass Products	4.83	6.12	7.48
33	Primary Metal Products	2.91	3.95	4.48
34	Fabricated Metal Products	3.89	4.23	6.24
35	Machinery except Electrical	4.36	4.75	6.52
36	Electric, Electronic Equipment	4.70	6.19	5.79
37	Transportation Equipment	3.87	5.13	4.00
38	Instruments	5.83	5.39	3.36
39	Miscellaneous Manufacturing	5.62	4.54	6.77
40	Railroad Transportation	11.08	12.30	-
41	Local Transportation	3.75	-3.04	-4.05
42	Trucking and Warehousing	3.28	2.99	2.64
44	Water Transportation	7.74	2.93	8.91
45	Air Transportation	2.47	6.44	5.09
46	Pipeline Transportation	14.45	21.36	22.81
47	Transportation Services	3.45	8.61	-
48	Communication	13.69	14.83	15.19
49	Utilities	6.76	5.88	9.64
50	Wholesale Durable	2.85	2.01	2.74
51	Wholesale Non-Durable	1.93	2.00	2.11
52	Building Materials	3.14	2.21	4.12
53	General Merchandise Stores	1.38	2.14	2.31
54	Food Stores	1.65	2.19	1.00
55	Automotive Dealers, Service Stations	1.40	1.26	1.40
56	Apparel Stores	3.08	2.63	5.78
57	Furniture Stores	2.97	2.52	4.40
58	Eating & Drinking Places	5.25	5.27	3.76
59	Miscellaneous Retail	3.10	2.57	13.20
60	Banking	15.30	10.17	11.04
61	Credit Agencies	12.67	10.60	8.30
62	Commodity Brokers	2.19	8.65	4.51
63	Insurance Carriers	7.94	7.12	9.99
64	Insurance Agents	8.21	11.65	-
65	Real Estate	14.58	8.13	6.99
66	Holding Investment Offices	9.26	11.17	7.86
70	Hotels, Motels	9.01	4.90	8.86
72	Personal Services	5.27	4.57	26.81
73	Business Services	5.66	3.76	9.29
75	Auto Repair Services	4.27	13.72	9.58
76	Miscellaneous Repairs	8.46	4.50	-
78	Motion Pictures	4.29	2.92	-
79	Recreation Excluding Motion Pictures	5.09	8.09	13.59
80	Health Services	4.01	-3.90	3.78
82	Educational Services	6.06	5.51	3.26
83	Social Services	5.83	7.75	6.60
84	Museums	19.09	25.55	-
86	Nonprofit Organizations	7.80	9.07	4.83
89	Miscellaneous Services	6.17	5.94	2.11

Note: A dash indicates that sample was insufficient for statistical accuracy. Generally, 25 observations were required to provide a minimal degree of acceptability. Data are preliminary and subject to revision.

Source: Small Business Data Base tabulated by Brookings Institution from the Dun and Bradstreet Financial Statistics for 1978.

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TABLE A1.32—*Survival Rates by Kind of Retail Business in Illinois*

Kind of Business	Number Started in 1974	Percentage Active in October 1979
Farm Equipment Dealers	110	63.6
Motor Vehicle Dealers (new and used)	127	55.9
Lumber Yards and other Build. Materials Dealers	116	53.5
Farm and Garden Supply Stores, n.e.c.	83	53.0
Hay, Grain, and Feed Stores	66	51.5
Drug Stores	203	50.7
Hardware Stores	230	49.1
Drapery, Curtain, and Upholstery Stores	95	46.3
Shoe Stores	88	44.3
Furniture Stores	149	44.3
Misc. Automotive Dealers	241	44.0
Jewelry Stores	170	43.6
Book and Stationery Stores	168	43.5
Household Appliance Stores	76	43.4
Tire, Battery, and Accessory Dealers	279	43.4
Paint, Glass, and Wallpaper Stores	68	42.7
Antique Stores	501	42.5
Florists	221	42.1
Mens and Boys Clothing and Furnishing Stores	109	41.3
Liquor Stores	234	40.2
Used-Car Dealers	465	38.9
Dry Goods and Genrl. Merchandise Stores	68	38.2
Sporting Goods Stores and Bicycle Shops	406	37.7
Eating and Drinking Places	745	36.5
Music Stores	151	35.8
Food Stores, n.e.c.	109	35.8
Misc. Stores, General Merchandise, n.e.c.	224	35.3
Misc. Home Furnishings Stores	114	35.1
Automatic Merchandising	134	35.0
Radio and Television Stores	164	34.8
Misc. Retail Stores, Specialized, n.e.c.	2,061	34.2
Floor-Covering Shops	157	33.8
Misc. Apparel and Accessory Stores	125	33.6
All Retail	17,252	33.2
Women's Ready-to-Wear Stores	192	31.8
Drinking Places (alcoholic beverages)	1,403	30.5
Direct Selling Organizations (incl door-to-door)	949	30.0
Family Clothing Stores	92	29.4
Mail-Order Houses	199	29.2
Gift, Novelty and Souvenir Shops	572	28.9
Meat and Fish Markets	143	28.7
Secondhand Stores	193	27.5
Limited Price Variety Stores	62	27.4
Grocery Stores	962	27.0

N.E.C. Not Elsewhere Classified.

Note: Only categories with 50 or more new starts in 1974 are listed.

Source: Alvin D. Star and Michael Z. Massel, "Survival Rates for Retailers," *Journal of Retailing*, Summer 1981, p. 92.

CHAPTER I .

TABLE A1.33—*Business Size Classifications for Employment*

Number of Employees	
	0
	1 - 4
	5 - 9
	10 - 19
	20 - 49
	50 - 99
	100 - 249
	250 - 499 ¹
<hr/>	
	500 - 999
	1,000 - 2,499
	2,500 - 4,999
	5,000 - 9,999
	10,000 or more

¹ Businesses with 499 or fewer employees are classified as small.

Note: Adopted by the Interagency Committee on Small Business Statistics, and published in the *Federal Register* and *Statistical Reporter* of December 1980.

Source: Department of Commerce, Office of Federal Statistical Policy and Standards, *Statistical Reporter*, Vol. 81—3, December 1980.

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TABLE A1.34—*Small Firms as a Percent of Total Firms Under Current Size Standards by Industry Divisions*
(Number)

Industry Division	Loans			Procurement		
	All Firms	Small Firms	Small Firms as % of Total	All Firms	Small Firms	Small Firms as % of Total
Mining	NA	NA	—	23,097	22,209	96.2
Construction	1,176,135	1,168,963	99.2	1,176,135	1,167,233	99.2
Manufacturing	299,351	281,127	93.9	299,351	284,111	94.9
Transportation, Communication, Utilities ¹	120,813	110,312	91.3	120,813	116,359	96.3
Wholesale Trade ²	286,925	273,117	95.2	286,925	282,481	98.5
Retail Trade	1,567,071	1,514,687	96.4	NA	NA	—
Insurance and Real Estate	NA	NA	—	NA	NA	—
Services	1,763,992	1,752,297	99.3	1,763,992	1,753,709	99.4
Total (Less Agriculture)	5,214,287	5,125,003	98.3	3,670,313	3,626,102	98.8
Agriculture ³	2,314,013	2,304,013	99.6	NA	NA	—
Total (With Agriculture)	7,528,300	7,429,516	98.7	3,670,313	3,626,102	98.8

NA—Not applicable. There is no current standard for these industries.

¹ Only those industries in which SBA makes loans are listed. Many industries in the Transportation, Communication, and Utilities group and most of the Finance, Insurance, and Real Estate group (including all of Finance) are not eligible for SBA programs.

² Merchant wholesalers, wholesale agents, brokers, and commission merchants are included. Sales outlets owned by manufacturers are not included as a wholesale function.

³ Agriculture is listed separately because SBA historically has made most of its loans to commercial enterprises rather than family farms.

Sources: Data derived by the Size Standards Branch, Small Business Administration, from the Economic Censuses, 1977, Dun & Bradstreet data for 1977, and the Census of Agriculture, 1974.

CHAPTER I

TABLE A1.35—Small Firms as a Percent of Total Sales Under Current Size Standards by Industry Divisions
(Millions of Dollars)

Industry Division	Loans			Procurement		
	All Firms	Small Firms	Small Firms as % of Total	All Firms	Small Firms	Small Firms as % of Total
Mining	NA	NA	—	96,410	22,270	23.1
Construction	235,571	157,138	66.7	235,571	160,486	68.1
Manufacturing	1,361,378	280,493	20.6	1,361,378	309,688	22.7
Transportation Communication, Utilities ¹	143,965	34,222	23.8	143,965	53,909	37.4
Wholesale Trade ²	802,717	362,856	45.2	802,717	512,706	63.9
Retail Trade	723,124	323,493	44.7	NA	NA	—
Insurance and Real Estate	NA	NA	—	NA	NA	—
Services	179,515	116,485	64.9	179,515	119,285	66.4
Total	3,446,270	1,274,687	37.0	2,819,556	1,178,344	41.8
(Less Agriculture)	81,295	73,166	90.0	NA	NA	—
Agriculture ³						
Total	3,527,565	1,347,853	38.2	2,819,556	1,178,344	41.8
(With Agriculture)						

NA—Not applicable. There is no current standard for these industries.

¹ Only those industries in which SBA makes loans are listed. Many industries in the Transportation, Communication, and Utilities group and most of the Finance, Insurance, and Real Estate group (including all of Finance) are not eligible for SBA programs.

² Merchant wholesalers, wholesale agents, brokers, and commission merchants are included. Sales outlets owned by manufacturers are not included as a wholesale function.

³ Agriculture is listed separately because SBA historically has made most of its loans to commercial enterprises rather than family farms.

Sources: Data derived by the Size Standards Branch, Small Business Administration, from the Economic Censuses, 1977, Dun & Bradstreet data for 1977, and the Census of Agriculture, 1974.

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TABLE A2.1—Ratio of Percentage Change in Employment by Nonagricultural Industry by Establishment Size to Percentage Change in Employment in All Industries by Establishment Size, 1977 to 1979

[Ratio]

Major Industry Group	Code	Establishment Employment				
		All Establishments	Less Than 20	20—99	100—499	500 or More
Metal Mining	10	-1.82	-0.17	1.18	1.09	-3.02
Anthracite Mining	11	-0.52	0.37	-0.21	-0.80	0.00
Bituminous Mining	12	0.34	0.91	1.15	0.17	0.05
Oil, Gas Extraction	13	2.06	1.60	1.45	1.38	3.64
Nonmetallic Minerals	14	0.34	-0.10	0.68	0.86	-8.54
General Contractors	15	1.70	1.59	1.74	2.00	4.40
Heavy Construction Contractors	16	1.34	1.26	1.11	2.41	0.39
Special Trade Contractors	17	1.75	1.48	1.99	2.91	2.27
Food Products	20	0.11	-0.76	-0.30	0.04	0.73
Tobacco	21	0.74	-0.17	-2.37	-2.26	2.75
Textile Mill Products	22	-0.21	-0.40	-0.44	-0.08	-0.24
Apparel and Other Textile Products	23	0.08	0.46	0.31	-0.03	-0.16
Lumber, Wood Products	24	0.80	0.45	0.55	0.62	4.18
Furniture, Fixtures	25	0.61	-0.01	0.64	0.46	0.89
Paper Products	26	0.37	0.16	0.03	0.48	0.36
Printing, Publishing	27	0.58	0.71	0.69	0.80	0.01
Chemicals	28	0.33	-0.15	0.13	0.54	0.29
Petroleum Products	29	-0.87	-0.86	-0.21	0.39	-2.34
Rubber Products	30	0.79	0.64	0.96	1.60	-0.72
Leather Products	31	-0.02	-0.25	-0.33	-0.08	0.95
Stone, Clay, Glass Products	32	0.63	-0.16	0.47	1.09	0.29
Primary Metals	33	0.66	-0.40	0.60	0.86	0.58
Fabricated Metal Products	34	1.02	0.25	0.85	0.95	1.31
Machinery, except Electrical	35	1.44	0.79	1.25	0.99	1.83
Electric & Electronic Equipment	36	1.36	0.44	0.58	1.44	1.43
Transportation Equipment	37	1.47	0.85	0.85	0.98	1.62
Instruments	38	1.16	0.20	0.82	1.20	1.24
Miscellaneous Manufacturers	39	0.16	-0.16	0.23	0.16	0.26
Railroad Transportation	40	4.22	5.45	0.00	0.00	0.00
Local Transportation	41	0.30	0.00	0.47	-0.11	4.68
Trucking	42	1.00	0.73	0.85	0.92	2.99
Water Transportation	44	-0.12	0.83	1.22	-0.66	-0.87
Air Transportation	45	-2.08	0.93	1.34	1.03	-3.83
Pipe Lines exc. Natural Gas	46	-0.08	1.09	1.37	-3.84	0.00
Transportation Services	47	1.94	2.21	1.43	3.24	0.00
Communication	48	0.50	0.36	0.93	0.61	0.31
Utilities	49	0.94	0.14	0.41	0.52	1.43
Wholesale-Durables	50	1.21	1.06	1.18	1.49	1.61
Wholesale-Non-Durables	51	0.61	0.42	0.55	0.93	0.73
Building Material Stores	52	0.88	0.47	1.17	1.29	6.89
General Merchandise Stores	53	0.31	-0.70	0.01	0.21	0.56
Food Stores	54	0.57	0.34	0.71	0.71	0.44

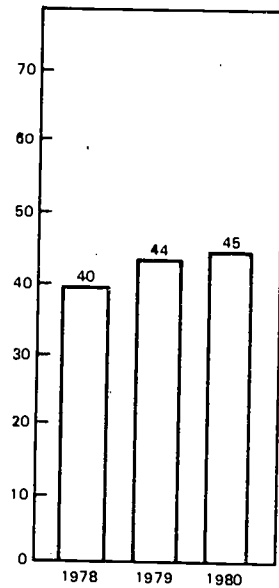
TABLE A2.1 (Continued)—Ratio of Percentage Change in Employment by Non-agricultural Industry by Establishment Size to Percentage Change in Employment in All Industries by Establishment Size, 1977 to 1979

	Major Industry Group	All Establishments	Establishment Employment			
			Less Than 20	20- 99	100- 499	500 or More
Auto Dealers, Service Stations	55	0.46	-0.13	0.57	2.32	-0.98
Apparel Stores	56	0.75	0.77	0.63	1.15	0.71
Furniture Stores	57	0.94	0.82	1.16	2.41	-8.54
Eating, Drinking Places	58	1.32	0.62	1.14	1.92	4.67
Miscellaneous Retail	59	0.89	0.64	0.96	1.19	2.99
Banking	60	0.73	-0.32	-0.63	0.66	0.73
Credit Agencies	61	1.30	0.39	1.10	2.30	1.30
Security Dealers	62	0.25	0.97	-0.17	-0.30	0.25
Insurance Carriers	63	0.70	0.67	0.26	0.62	0.70
Insurance Agents	64	0.81	1.32	0.56	-0.45	0.81
Real Estate	65	1.03	1.90	1.01	1.68	1.03
Combined Offices	66	-2.21	-2.74	-2.57	0.00	-2.21
Holding, Investment Cos.	67	0.84	1.33	1.20	0.17	0.84
Hotels and Lodging Places	70	0.43	0.14	0.29	0.04	0.43
Personal Services	72	0.41	0.38	0.44	0.81	0.41
Business Services	73	1.99	1.98	1.60	2.00	1.99
Auto Repair Services	75	1.70	1.81	2.08	2.56	1.70
Miscellaneous Repair Services	76	1.76	1.60	1.87	2.94	1.76
Motion Pictures	78	0.66	-0.32	0.03	1.44	0.66
Amusement & Recreation	79	0.90	0.90	0.76	1.77	0.90
Health Services	80	0.81	1.29	0.48	0.76	0.81
Legal Services	81	1.37	1.57	1.47	0.67	1.37
Educational Services	82	4.21	9.76	10.14	2.17	4.21
Social Services	83	2.71	3.55	2.08	2.94	2.71
Museums, Botanical Gardens	84	0.59	2.34	0.30	-0.07	0.59
Membership Organizations	86	0.54	0.53	0.67	0.41	0.54
Miscellaneous Services	89	1.99	1.85	1.82	1.58	1.99

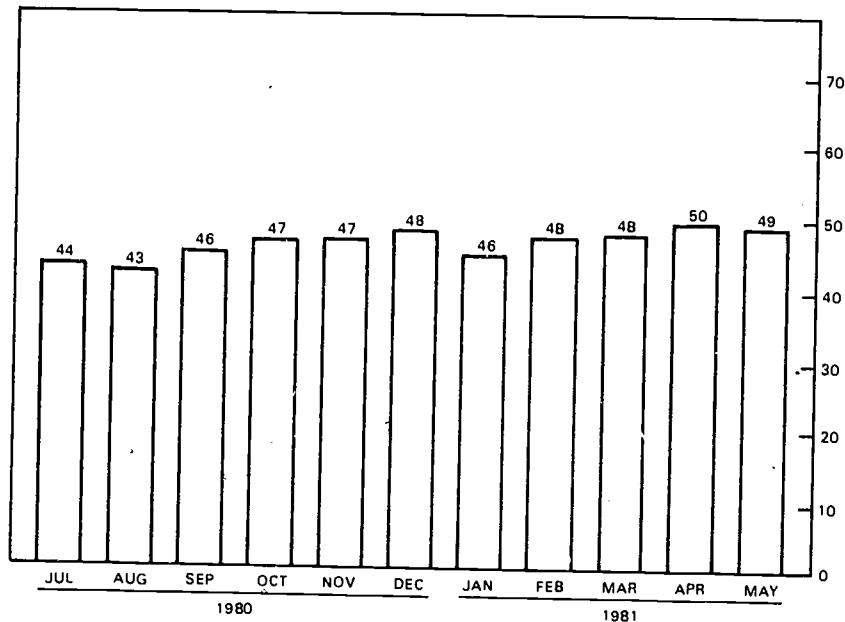
Source: Small Business Data Base based upon unpublished data from the Unemployment Insurance (U.I.) System, courtesy of the Bureau of Labor Statistics.

CHAPTER II
 CHART A2.2
 NEW BUSINESS INCORPORATIONS
 BY MONTHS
 (SEASONALLY ADJUSTED)

NUMBER IN
 THOUSANDS



MONTHLY AVERAGE



SOURCE DUN & BRADSTREET, INC. MONTHLY NEW INCORPORATIONS AS PUBLISHED IN BUSINESS CONDITIONS DIGEST

CHAPTER II

TABLE A2.3—Final Income Tax Returns Filed by Partnerships by Industry Division, 1978

Major Industry	Final Returns (1)	Percent of All Final Returns (2)	Percent of All Industry Returns ² (3)	Relative Final Return Rate ¹ (3)/10.28	Rank Among Major Industry Groups
All Industries	126,825	100.00	10.28	1.000	
Agriculture, Forestry, Fisheries (01-02), (07-09)	9,303	7.34	7.33	0.713	
Farms (01-02)	7,519	5.93	6.86	0.667	34.
Forestry, Fisheries (07-09)	1,784	1.41	10.25	0.997	25.
Mining, (10-14)	2,248	1.77	9.51	0.925	
Oil and Gas Extraction (13)	1,739	1.37	8.66	0.842	29.
Other Mining (10-12, 14)	509	0.40	14.33	1.394	11.
Construction, (15-17)	13,358	10.53	17.12	1.665	
General Building Contractors (15)	5,180	4.08	16.37	1.592	5.
Special Trade Contractors (17)	8,095	6.38	17.55	1.707	3.
Not Allocable (16)	83	0.07	31.44	3.058	
Manufacturing, (20-39)	2,879	2.27	10.31	1.003	
Lumber, Wood Products (24)	400	0.32	7.31	0.711	32.
Printing, Publishing (27)	630	0.50	11.95	1.162	20.
Machinery Except Electrical (35)	278	0.22	14.15	1.376	12.
Other Manufacturing	1,571	1.24	10.32	1.004	23.
Transportation Communication, Utilities (40-49)	2,574	2.03	12.94	1.259	
Trucking, Warehousing (42)	1,794	1.41	14.86	1.446	9.
Other Transportation (41-49)	525	0.41	11.57	1.125	21.
Communications, Utilities (48-49)	255	0.20	7.79	0.758	30.
Wholesale Trade, (50-51)	4,555	3.59	15.62	1.519	7.
Retail Trade, (52-59)	24,828	19.58	14.57	1.417	
Building Materials (52)	1,044	0.82	11.15	1.085	22.
General Merchandise (53)	562	0.44	13.59	1.322	14.

TABLE A2.3—Continued

Major Industry	Final Returns (1)	Percent of All Final Returns (2)	Percent of All Industry Returns ^a (3)	Relative Final Return Rate ¹ (3)/10.28	Rank Among Major Industry Groups
Food Stores (54)	3,870	3.05	17.12	1.665	4.
Auto Dealers, Service Stations (55)	3,381	2.67	13.32	1.296	16.
Apparel Stores (56)	1,876	1.48	15.44	1.502	8.
Furniture Stores (57)	2,354	1.86	19.04	1.852	1.
Eating, Drinking Places (58)	4,835	3.81	13.21	1.285	17.
Other Retail (59)	6,906	5.45	14.45	1.406	10.
Trade Not Allocable	182	0.14	28.98	2.819	
Finance, Insurance, Real Estate (60—67)	35,369	27.89	6.85	0.666	
Banks, Credit Agencies (60—61)	169	0.13	7.23	0.703	33.
Security, Commodity Brokers (62)	86	0.07	3.01	0.293	36.
Insurance Agents (64)	502	0.40	7.56	0.735	31.
Real Estate (65)	24,665	19.45	6.31	0.614	35.
Holding Investment Companies (67)	9,947	7.84	8.77	0.853	28.
Services, (70—89)	31,529	24.86	13.07	1.271	
Hotel, Lodging Places	1,578	1.24	8.90	0.866	27.
Personal Services (72)	3,565	2.81	13.40	1.304	15.
Business Services (73)	5,556	4.38	13.97	1.359	13.
Auto Services (75)	3,102	2.45	12.83	1.248	18.
Miscellaneous Repairs (76)	1,662	1.31	17.59	1.711	2.
Amusement, Recreation (78—79)	2,326	1.83	12.38	1.204	19.
Health Services (80)	1,801	1.42	9.17	0.892	26.
Legal Services (81)	2,948	2.32	10.30	1.002	24.
Other Services (82—89)	8,991	7.09	15.91	1.548	6.

¹ Ratio of percent of all industry returns to percent of all returns for all industries.

² Percent of returns in each industry that are final.

Note: A final income tax return is an income tax return that indicates no future returns are contemplated.

Source: Department of the Treasury, Internal Revenue Service, special analysis of October 21, 1981.

CHAPTER II

TABLE A2.4—*Increase in Business Failures by Selected Major Industry Groups First Quarter 1980 to First Quarter 1981*

(Percent)

Total	48
Manufacturing and Mining	47
Lumber and Lumber Products	44
Paper, Printing and Publishing	130
Stone, Clay and Glass	33
Metals, Primary and Fabricated	39
Machinery	125
Wholesale Trade	35
Lumber, Building Supplies and Hardware	46
Machinery, Equipment and Supplies	67
Retail Trade	46
Food and Liquor	54
Apparel Accessories	48
Lumber, Building Materials and Hardware	73
Automobile Group	53
Eating and Drinking Places	41
Construction	48
Building Subcontractors	68
Miscellaneous Contractors	105
Commercial Services	68
Miscellaneous Personal services	60
Business Services	53
Repair Services	88

Dun and Bradstreet, *Monthly Business Failures*.

CHAPTER II

TABLE A2.5—*Gross Product Originating in Small Business by Major Industry Division, 1955-76*
(Percent)

Year	Small Business as a Percent of GNP	Small Business as a Percent of Private Industry Gross Product Originating	Mining	Construc- tion	Manufac- turing	Transportation, Communication, Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, Real Estate	Services (less households)
1976	39	48	32	83	19	22	84	62	46	82
1975	39	47	26	83	20	18	85	63	43	82
1974	39	47	26	84	20	19	84	63	43	83
1973	39	48	31	84	21	21	85	64	45	83
1972	40	49	32	84	21	20	85	65	48	83
1971	41	49	43	84	21	21	87	65	49	83
1970	41	50	39	85	22	21	87	67	49	84
1969	41	49	39	83	22	22	87	67	50	84
1968	41	49	37	84	23	22	87	68	50	84
1967	42	50	40	84	23	23	89	70	52	84
1966	42	50	43	85	24	21	90	69	55	85
1965	43	51	45	85	24	24	89	71	56	85
1964	42	50	47	84	25	18	90	72	52	84
1963	43	52	45	86	26	26	89	73	57	84
1962	43	52	45	87	27	24	89	73	55	84
1961	43	52	50	87	27	23	90	74	54	85
1960	43	52	50	89	28	22	89	75	53	85
1959	43	51	50	88	27	20	88	75	52	86
1958	43	51	52	88	28	19	89	75	49	86
1957	44	52	53	88	29	20	89	76	51	86
1956	44	52	51	87	29	21	89	77	51	86
1955	43	52	50	87	30	23	89	77	53	87

Source: Joel Popkin and Company, "Measuring Gross Product Originating in Small Business: Methodology and Annual Estimates, 1955 to 1976, September 1980, prepared under contract for the Small Business Administration.

CHAPTER II

TABLE A2.6—Average Net Employment Change by Industry Division and Employment Size of Enterprise, 1972-77

Industry Division	Employment Size of Enterprise—1972		
	1-9	10-99	100-499
Total	-.16	2.14	23.38
Agriculture	-.24	2.06	34.87
Mining	-.28	4.33	46.88
Construction	-.54	.72	11.76
Manufacturing	-.25	2.07	18.33
Transportation, Communication, Utilities	-.66	2.33	23.60
Wholesale Trade	.01	2.87	30.27
Retail Trade	-.06	2.37	31.28
Finance, Insurance, Real Estate	-2.90	-8.77	25.17
Services	-.22	1.92	34.76

Note: Data represent net additions or net losses to an average company in the particular industry and size class.

Source: Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet's Market Identifier file.

CHAPTER II

TABLE A2.7—Percentage Growth in Employment by State and Employment Size of Establishment, 1977-1979
[Percent of Change]

State	Employment Size of Establishment				Total Change
	Less Than 20	20-99	100-499	500 or More	
U.S. Total	9.17	13.24	13.16	11.70	11.84
Alabama	9.09	10.77	9.22	7.14	9.06
Alaska	8.48	-5.14	-19.81	-100.00	-12.14
Arizona	17.76	35.45	55.35	11.91	29.99
Arkansas	6.33	9.84	13.95	66.53	14.45
California	15.81	18.04	19.90	19.92	18.48
Colorado	15.37	22.48	15.26	30.13	19.20
Connecticut	9.78	10.82	13.79	-1.29	7.40
Delaware	7.11	8.90	11.39	-2.29	6.18
District of Columbia	5.09	5.86	19.02	6.58	8.76
Florida	19.23	24.85	31.64	6.53	21.31
Georgia	10.63	16.94	12.91	-2.18	10.74
Hawaii	13.04	7.05	14.53	29.77	13.12
Idaho	13.35	14.83	0.45	-35.79	8.76
Illinois	1.00	6.82	9.86	9.96	7.49
Indiana	8.82	10.09	11.03	1.58	7.64
Iowa	2.89	7.08	6.17	12.71	6.82

TABLE A2.7—Continued

Kansas	6.47	9.97	9.00	26.27	11.44
Kentucky	8.48	13.62	12.14	18.33	12.55
Louisiana	6.92	15.02	15.06	21.27	13.86
Maine	9.30	17.96	-1.87	-15.47	5.71
Maryland	10.81	12.51	10.70	7.09	10.39
Massachusetts	11.12	9.87	11.39	14.99	11.90
Michigan	6.22	12.47	15.14	11.33	11.36
Minnesota	11.02	12.53	20.57	16.09	14.72
Mississippi	13.34	16.28	9.36	36.41	16.32
Missouri	8.12	9.90	9.22	13.46	10.11
Montana	10.77	11.86	-8.41	26.77	8.74
Nebraska	5.01	7.74	-0.39	21.86	6.31
Nevada	22.91	32.62	9.86	28.16	24.18
New Hampshire	11.04	22.21	7.87	24.13	14.87
New Jersey	8.02	11.45	8.92	19.14	11.32
New Mexico	11.95	17.15	4.21	45.61	13.52
New York	2.11	7.00	8.19	2.77	4.83
North Carolina	7.34	12.82	10.58	18.15	12.02
North Dakota	7.78	15.74	-6.07	-2.80	8.13
Ohio	4.95	11.24	10.44	11.72	9.93
Oklahoma	9.15	11.03	19.45	0.83	10.69
Oregon	14.54	21.92	15.72	38.72	19.25
Pennsylvania	7.17	8.74	8.87	4.00	7.06
Rhode Island	3.30	8.03	8.42	-19.57	2.17
South Carolina	8.86	17.43	10.88	9.73	11.61
South Dakota	4.82	10.28	0.03	144.60	8.65
Tennessee	7.79	13.90	8.71	12.79	10.78
Texas	11.05	16.23	16.39	23.46	17.12
Utah	10.70	18.38	22.59	21.26	13.21
Vermont	11.98	18.29	-16.60	0.18	7.49
Virginia	9.82	10.91	12.67	1.02	8.03
Washington	13.67	20.69	16.33	33.39	19.66
West Virginia	2.98	9.66	-1.45	-6.24	0.79
Wisconsin	4.83	9.64	13.41	22.25	12.27
Wyoming	26.81	41.03	19.20	146.75	33.13

Source: Small Business Data Base based upon unpublished data from the Unemployment Insurance (U.I.) System, courtesy of the Bureau of Labor Statistics.

CHAPTER II

TABLE A2.8—Proportion of Firms Increasing Employment to Firms Decreasing Employment by State and Employment Size of Firm in Base Year, 1972-77

[Percent]

State	Employment Size of Firm Base Year		
	1-9	10-99	100-499
U.S. Average	1.0	2.2	2.7
Alabama	1.2	2.6	2.9
Alaska	2.7	6.9@	—
Arizona	1.0	2.0	2.6
Arkansas	1.1	3.0@	5.4@

TABLE A2.8—(Continued). *Proportion of Firms Increasing Employment to Firms Decreasing Employment by State and Employment Size of Firm in Base Year, 1972-77*

California	1.2	2.8	3.4 @
Colorado	1.1	2.6	2.8
Connecticut	0.8	1.7 *	2.3
Delaware	0.9	1.6 *	2.0
District of Columbia	0.7	1.8	1.5 *
Florida	0.9	1.7 *	2.3 *
Georgia	0.9	1.7 *	2.7
Hawaii	0.8	1.7 @	2.2 *
Idaho	1.1	4.7 @	—
Illinois	1.1	2.2	2.2 *
Indiana	1.0	2.3	2.6 @
Iowa	1.1	2.7	3.4
Kansas	1.1	2.7	3.0
Kentucky	1.1	2.5	3.2
Louisiana	1.3	3.3 @	3.0
Maine	0.9	2.3	1.6 *
Maryland	0.8	1.9	2.6
Massachusetts	0.8	1.7 *	2.1
Michigan	0.9	2.0	2.4
Minnesota	1.3	2.8	3.6 @
Mississippi	1.0	2.4	2.5
Missouri	1.0	2.2	2.4
Montana	1.2	2.8	—
Nebraska	1.1	2.9	2.8
Nevada	1.4	3.7 @	—
New Hampshire	0.8	2.4	2.5
New Jersey	0.9	1.7 *	2.4
New Mexico	1.3	3.4 @	—
New York	0.8	1.8	2.4
North Carolina	0.9	1.6 *	1.9 *
North Dakota	1.6	3.7 @	—
Ohio	1.0	2.1	2.4
Oklahoma	1.3	2.9 @	4.4 @
Oregon	1.2	2.8	3.6 @
Pennsylvania	0.9	1.8	2.2 *
Rhode Island	0.8	1.6 *	2.0 *
South Carolina	0.8	1.7	2.0 *
South Dakota	1.1	2.8	—
Tennessee	0.9	1.9	2.3
Texas	1.1	2.8	4.4 @
Utah	1.1	4.3 @	5.3 @
Vermont	1.1	2.3	2.6
Virginia	0.2	1.6 @	2.5
Washington	1.2	3.7	3.5 @
West Virginia	1.0	2.6	—
Wisconsin	1.1	2.7	3.1
Wyoming	1.6	3.4 @	—

*One of the ten smallest net employment changes from 1972 to 1977 for this firm employment size category.

@ One of the ten largest net employment changes for 1972 to 1977 for this firm employment size category.

—Extreme values due to weakness in sampling generate a computed value which is unrealistic for comparison purpose and is therefore omitted.

Source: Small Business Data Base tabulated by Brookings Institution from Dun and Bradstreet's Market Identifier file.

CHAPTER II

TABLE A2.9—*Distribution of Establishments and Employment Within Establishments by State and Employment Size of Firms, 1978*

[Percent]

State	Percent of Total Number of Establishments			Percent of Total Employment		
	Employment Size Class					
	10 or More	100 or More	500 or More	10 or More	100 or More	500 or More
U.S. Average	23.2	2.3	.36	83.5	51.6	28.8
Alabama	24.6	2.7	.45	84.6	54.9	30.3
Alaska	17.8 *	1.4 *	.09	74.4 *	32.9 *	7.3 *
Arizona	20.8	1.7	.25	29.7	4.3	26.5
Arkansas	20.0 *	2.0	.30	79.9	47.7	22.2
California	22.9	2.0	.30	82.3	48.3	26.9
Colorado	22.9	1.8	.25	81.3	45.6	26.3
Connecticut	23.9	2.7	.46	86.0	57.4 @	35.6 @
Delaware	25.6 @	2.4	.42	84.5	50.3	29.2
Dist. Col.	32.7 @	3.2 @	.56 @	88.1 @	56.4 @	35.9 @
Florida	20.3 *	1.7	.21	78.3	41.7	21.8
Georgia	22.8	2.5	.34	87.0	51.3	25.6
Hawaii	25.6 @	1.8	.26	79.4	38.7	18.2 *
Idaho	19.2 *	1.3 *	.19	76.9 *	38.5 @	18.5 *
Illinois	24.6	2.7	.44	85.4	57.3 @	33.4
Indiana	24.5	2.7	.48 @	86.5 @	59.3 @	38.0 @
Iowa	21.5	1.9	.29	80.8	47.9	26.9
Kansas	21.0	1.8	.22	79.5	44.4	22.6
Kentucky	21.4	2.2	.36	82.3	51.2	27.5
Louisiana	24.1	2.3	.31	82.8	48.9	25.9
Maine	22.9	2.3	.37	82.9	49.8	24.2
Maryland	26.2 @	2.4	.35	84.2	50.3	27.6
Massachusetts	25.6 @	3.0 @	.42	86.1 @	54.4	28.4
Michigan	25.7 @	2.5	.41	86.1 @	55.5	34.8 @
Minnesota	22.4	2.2	.31	82.3	50.6	25.1
Mississippi	22.5	2.3	.40	83.0	53.5	27.3
Missouri	21.6	2.2	.32	82.4	51.0	27.7
Montana	17.9	1.0 *	.16 *	70.2 *	30.9 *	15.7 *
Nebraska	21.3	1.7	.15 *	80.2	45.4	24.2
Nevada	22.7	1.9	.39	82.1	52.8	32.8
New Hampshire	22.9	2.6	.38	83.6	50.2	23.3
New Jersey	23.9	2.7	.37	84.5	52.0	26.6
New Mexico	21.7	1.5 *	.24	78.9	42.6	24.2
New York	22.9	2.3	.38	84.5	54.0	32.4
North Carolina	21.4	1.3 *	.10 *	73.7 *	32.9 *	14.5 *
North Dakota	24.2	3.0 @	.45	84.8	55.7	28.0
Ohio	25.0	2.8 @	.49 @	86.6 @	57.5 @	34.7 @
Oklahoma	20.1 *	1.7	.22	77.8	42.0	21.0
Oregon	20.4	1.7	.24	79.1	43.4	22.3
Pennsylvania	24.2	3.0 @	.49 @	86.6 @	58.2 @	33.2
Rhode Island	24.8	2.6	.46	85.2	51.1	26.9
South Carolina	23.3	2.9 @	.62 @	85.7	59.5 @	35.3 @

TABLE A2.9—Continued

South Dakota	20.4	1.3*	.14	73.3*	31.3*	21.3
Tennessee	24.4	2.8@	.43	84.6	54.3	28.6
Texas	23.0	2.2	.29	82.4	48.5	25.2
Utah	21.8	1.7	.24	81.4	48.2	29.0
Vermont	21.9	2.1	.22	80.7	38.5	20.0
Virginia	25.2	2.4	.37	84.1	51.2	22.7
Washington	20.6	1.6	.24	79.5	44.2	25.5
West Virginia	24.5	2.5	.49@	84.8	55.2	32.1
Wisconsin	24.5	2.5	.40	84.6	52.2	28.7
Wyoming	21.3	1.6	.17	75.6*	35.8*	12.2

*One of the 10 smallest states within each size class.

@One of the 10 largest states within each size class.

Note: Data exclude government employment.

Source: Small Business Data tabulated by Brookings Institution from Dun and Bradstreet's Market Identifier file.

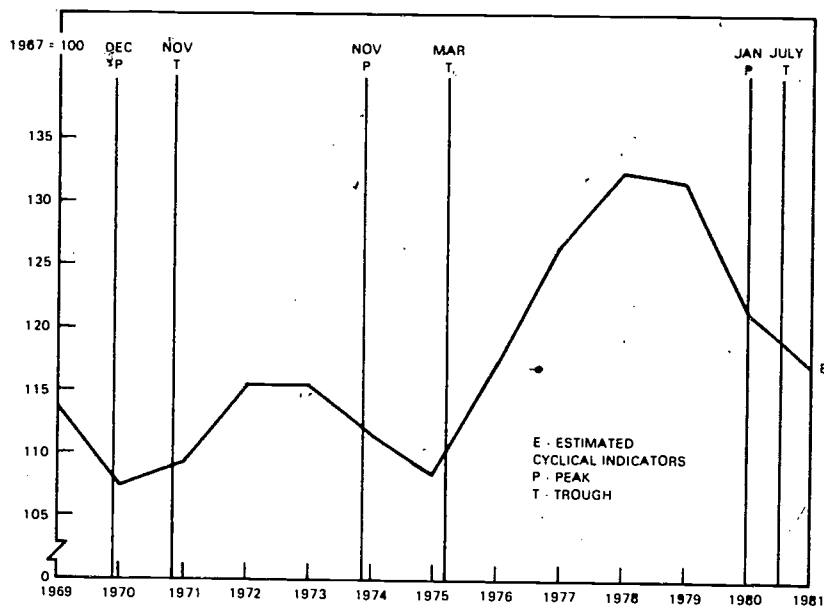
CHAPTER II

TABLE A2.10—*Net Employment Change for Establishments Existing at the Beginning and End of the Period: 1969–76, By Age of Establishment*
[Number and Percent]

Employment Size in 1969	Age in Years				
	Total	0–4	5–8	9–12	13 or more
100 or less	1,999,986	482,254	405,805	256,940	854,987
Over 100	–421,031	–19,758	–33,018	–26,652	–341,603
Total	1,578,955	462,496	372,787	230,288	513,384
Employment Distribution in 1969	Percent				
	Total	0–4	5–8	9–12	13 or more
100 or less	100.0	24.1	20.3	12.8	42.8
Over 100	100.0	4.7	7.8	6.3	81.2
Total	100.0	29.3	23.6	14.6	32.5

Source: Adapted from David L. Birch and Susan MacCracken, "Corporate Evolution: A Micro-Based Analysis," MIT Program on Neighborhood and Regional Change, January 1981, p. 16, supported by Grant No. 14151 from the Small Business Administration.

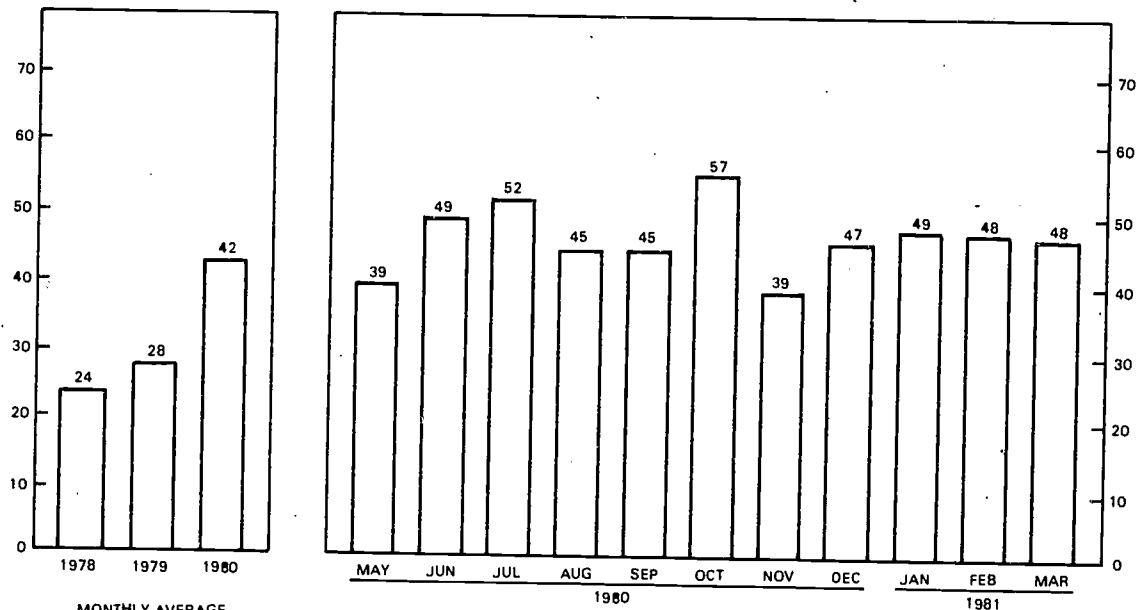
CHAPTER II
CHART A2.11
INDEX OF NET BUSINESS FORMATION
1969-81



SOURCE BUSINESS CONDITIONS DIGEST

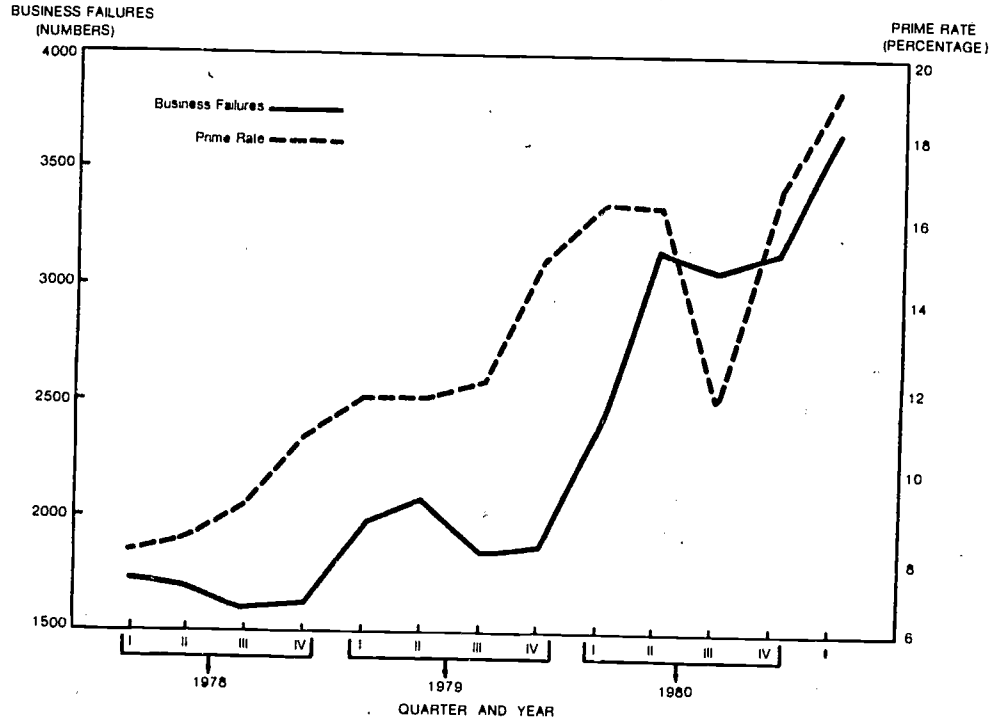
CHAPTER II
 CHART A2.12
 BUSINESS FAILURES
 BY MONTHS
 (SEASONALLY ADJUSTED)

NUMBER PER
 10,000 FIRMS



NOTE: DATA REPRESENTS NUMBER OF BUSINESS FAILURES PER 10,000 FIRMS LISTED IN THE DUN & BRADSTREET REFERENCE BOOK.
 SOURCE: DUN & BRADSTREET, INC. MONTHLY FAILURES

BUSINESS FAILURES AND PRIME RATE, 1978-80



SOURCES: FEDERAL RESERVE BULLETIN; DUN & BRADSTREET

Published by the National Small Business Association in "Report on Business Bankruptcies, Sept. 12, 1981"

Chapter II

TABLE A2.14—*Sales Per Employee by Employment Size of Enterprise, 1978*

[Thousands of Dollars]

Industry Division	Employment Size of Enterprise										10,000 or more
	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-9999	1000-4999	5000-9999	
All Industries	57.4	60.2	60.1	57.8	54.9	49.8	46.8	53.5	57.5	62.6	68.0
Agriculture, Forestry, Fishing	58.6	54.1	48.6	50.2	49.4	36.4	38.2	45.0	44.4	51.2	71.5
Mining	96.2	80.6	77.1	59.9	58.9	64.9	57.3	80.4	136.4	69.1	246.2
Construction	61.9	56.0	54.5	53.6	55.5	51.7	51.9	48.8	46.5	57.0	31.7
Manufacturing	47.3	43.1	44.9	44.3	43.7	44.5	43.8	45.3	52.8	58.8	65.8
Transportation, Communication, Utilities	51.4	59.7	48.9	45.5	49.2	50.5	51.3	57.7	95.8	106.5	63.7
Wholesale Trade	132.0	138.5	135.1	132.1	134.3	141.6	150.9	244.6	185.9	139.2	82.2
Retail Trade	44.6	45.1	47.7	50.7	58.2	50.1	40.3	37.5	48.3	47.6	60.6
Finance, Insurance, Real Estate	145.6	137.0	131.2	123.5	125.2	97.6	80.2	76.6	82.5	63.3	57.8
Services	34.4	36.8	34.2	28.6	22.7	19.7	20.8	20.1	20.1	23.9	13.3

Note: Data exclude subsidiaries and firm without sales.

Source: Small Business Data Base, tabulated by Brookings Institution from Dun and Bradstreet's Market Identifier file.

CHAPTER II

TABLE A2.15—*Annual Payroll Per Employee By Industry Divisions and Employment Size of Enterprise, 1977*

(Dollars)

Industry Division Code ¹	Title	All	1-99	100-999	1,000 or more	Ratio	
		(1)	(2)	(3)	(4)	(2)/(4)	(2)/(1)
	All Industries	11,364	9,771	10,384	13,279	73.6	86.0
07-09	Agricultural Services, Forestry, Fisheries	8,640	8,920	8,150	—	—	103.2
10-14	Mining	15,949	14,641	16,535	16,494	88.8	91.8
15-17	Construction	14,864	13,804	16,927	18,408	75.0	92.9
20-39	Manufacturing	13,678	11,175	11,379	14,964	74.7	81.7
40-49	Transportation, Communication, Utilities	15,075	10,795	13,957	16,820	64.2	71.6
50-51	Wholesale Trade	12,733	12,697	12,875	12,703	100.0	99.7
52-59	Retail Trade	7,180	6,750	7,200	7,853	86.0	94.0
60-69	Finance, Insurance, Real Estate	11,332	10,144	11,158	12,386	81.9	89.5
70-89	Services	9,113	9,193	8,221	9,958	92.3	100.9

¹ Farms (SIC 01), government (SIC 90-94), and private households (SIC 88) are not included.

Note: Payroll data include fringe benefits, where applicable.

Source: Department of Commerce, Bureau of the Census, *County Business Patterns, 1977, Enterprise Statistics*, Table 2.

CHAPTER II

TABLE A2.16—*Employment Growth of Wage and Salary Workers And Change in the Share of Small Business By Industry Divisions, 1972-77*

(Percent)

Industry Division	Growth in Covered Employment, 1972-77	Distribution of Covered Employment, 1977	Change in Small Business Share, 1972-77
Total, excl. government	13.4	100.0	0.5
Agriculture, Forestry, Fisheries	124.9	0.8	-18.3
Mining	31.3	1.3	-6.6
Construction	1.9	5.4	2.5
Manufacturing	3.4	30.5	1.8
Transportation, Communication, Utilities	5.4	6.4	6.3
Wholesale and Retail Trade	16.7	28.1	-1.4
Finance, Insurance, Real Estate	16.0	6.7	0.5
Services	29.5	20.8	-5.7

¹ Small business is defined as establishments with 100 employees or less.

Source: Bruce D. Phillips, "The Small Business Employment Share and Business Failures for Major 2 Digit SIC Industries," presented at the Small Business Research Conference, Waltham, Mass., March 10-13, 1981, based upon Unemployment Insurance data (unpublished), courtesy Bureau of Labor Statistics.

Note: Covered employment refers to workers as being covered by the Unemployment Insurance (U.I.) system.

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CHAPTER II

TABLE A2.17—Distribution of Employment by State and Employment Size of Establishment: 1975, 1977 and 1979

(Percent)

State	1975 Employment Size of Establishment				1977 Employment Size of Establishment				1979 Employment Size of Establishment			
	1-19	20-99	100-499	500 or more	1-19	20-99	100-499	500 or more	1-19	20-99	100-499	500 or more
United States Total	23.90	25.05	23.35	27.70	23.46	25.29	23.93	27.32	24.00	26.74	24.54	24.72
Alabama	25.62	24.99	26.37	23.01	24.65	24.75	25.94	24.66	24.66	25.14	25.98	24.23
Alaska	34.69	33.06	24.92	7.33	36.36	35.79	18.04	9.81	44.89	38.61	16.47	0.00
Arizona	30.51	29.92	21.48	18.09	29.47	30.40	21.18	18.95	26.69	31.67	25.32	16.32
Arkansas	35.56	30.31	27.56	6.57	34.15	30.25	27.33	8.27	31.73	29.03	27.21	12.03
California	23.60	24.67	22.92	28.80	23.32	25.29	24.17	27.21	22.79	25.20	24.46	27.54
Colorado	31.62	33.60	23.33	11.45	31.75	33.45	24.80	10.00	30.73	34.37	23.98	10.92
Connecticut	22.21	23.15	20.76	33.89	22.07	23.42	22.65	31.87	22.56	24.16	23.99	29.29
Delaware	29.98	29.80	15.35	24.87	30.21	30.49	16.23	23.07	30.47	31.27	17.03	21.23
District of Columbia	26.54	30.26	25.81	17.39	26.36	32.30	22.57	18.77	25.47	31.43	24.70	18.40
Florida	29.97	30.03	22.53	17.48	29.57	29.48	22.39	18.57	29.06	30.34	24.30	16.30
Georgia	25.56	27.88	26.25	20.30	24.59	27.80	27.67	19.94	24.57	29.35	28.47	17.61
Hawaii	28.76	33.76	25.03	12.45	30.03	34.53	24.80	10.64	30.01	32.67	25.11	12.21
Idaho	41.72	36.67	16.30	5.31	40.44	36.21	17.52	5.83	42.15	38.23	16.18	3.44
Illinois	19.38	25.37	24.98	30.27	18.43	25.25	25.55	30.76	17.32	25.09	26.11	31.47
Indiana	22.77	26.20	21.86	29.16	22.22	26.70	23.01	28.06	22.47	27.31	23.74	26.49
Iowa	31.28	26.78	19.56	22.38	31.04	27.10	20.14	21.71	29.90	27.17	20.02	22.91
Kansas	33.13	29.81	20.96	16.10	31.65	29.46	21.81	17.09	30.24	29.07	21.33	19.36
Kentucky	29.90	28.61	25.53	15.96	28.51	28.64	26.16	16.68	27.48	28.91	26.06	17.54
Louisiana	27.79	30.56	26.97	14.68	26.49	30.61	27.33	15.57	24.87	30.92	27.62	16.59
Maine	34.24	30.22	25.35	10.18	31.00	29.50	26.73	12.76	32.05	32.92	24.82	10.21
Maryland	25.13	26.05	24.50	24.32	24.97	26.56	25.86	22.62	25.07	27.07	25.93	21.94
Massachusetts	22.68	25.83	25.07	26.43	21.52	26.22	25.46	26.80	21.37	25.74	25.34	27.54

TABLE A2.17—Distribution of Employment by State and Employment Size of Establishment: 1975, 1977 and 1979 (Continued)
(Percent)

State	1975 Employment Size of Establishment				1977 Employment Size of Establishment				1979 Employment Size of Establishment			
	1-19	20-99	100-499	500 or more	1-19	20-99	100-499	500 or more	1-19	20-99	100-499	500 or more
Michigan	21.62	21.90	20.64	35.84	20.13	22.20	21.05	36.62	19.20	22.42	21.76	36.62
Minnesota	27.33	29.64	23.50	19.54	27.24	30.12	24.15	18.49	26.36	29.54	25.38	18.71
Mississippi	32.33	29.08	28.10	10.49	30.06	27.52	28.15	14.28	29.29	27.51	26.46	16.74
Missouri	24.84	26.30	25.44	23.41	24.24	26.78	26.06	22.91	23.80	26.73	25.85	23.61
Montana	49.53	35.82	12.73	1.92	47.49	35.83	14.47	2.22	48.37	36.86	12.19	2.59
Nebraska	35.91	32.62	22.71	8.76	34.96	32.80	22.61	9.62	34.54	33.24	21.19	11.03
Nevada	30.04	23.12	18.82	28.02	27.46	23.30	19.52	29.72	27.18	24.88	17.27	30.67
New Hampshire	32.64	33.17	28.06	6.13	30.89	31.60	28.32	9.18	29.86	33.62	26.59	9.92
New Jersey	24.56	28.56	27.55	19.34	24.45	29.19	27.99	18.37	23.72	29.23	27.39	19.66
New Mexico	43.21	38.41	15.98	2.40	40.98	38.06	18.04	2.93	40.41	39.27	16.56	3.76
New York	24.73	24.17	21.44	29.66	24.63	24.66	21.85	28.86	23.99	25.17	22.55	28.29
North Carolina	23.69	24.84	29.87	21.60	23.11	24.92	30.49	21.48	22.15	25.10	30.10	22.65
North Dakota	45.14	37.74	14.52	2.60	44.32	36.39	15.36	3.92	44.18	38.95	13.34	3.53
Ohio	20.98	24.46	22.80	31.77	20.22	24.62	23.59	31.57	19.30	24.92	23.70	32.08
Oklahoma	31.25	29.90	22.87	15.98	30.38	29.57	23.17	16.89	29.95	29.66	25.00	15.39
Oregon	33.44	32.63	24.48	9.46	32.99	33.19	25.71	8.11	31.68	33.94	24.95	9.43
Pennsylvania	20.63	23.46	25.77	30.14	20.62	23.99	26.00	29.39	20.64	24.36	26.44	28.55
Rhode Island	32.19	33.42	22.68	11.70	29.27	30.90	23.28	16.55	29.60	32.67	24.70	13.03
South Carolina	25.69	24.40	26.17	23.73	24.74	23.30	26.57	25.38	24.13	24.52	26.40	24.95
South Dakota	49.25	37.66	12.89	0.00	46.87	36.00	15.27	1.86	45.22	36.54	14.06	4.18
Tennessee	24.10	24.61	27.44	23.84	22.74	22.88	27.50	26.88	22.13	23.53	26.98	27.36
Texas	22.89	23.42	22.12	31.57	23.15	24.37	24.14	28.34	21.95	24.18	23.99	29.88
Utah	37.05	37.43	20.12	5.31	35.11	35.80	20.66	8.43	34.33	37.43	22.38	5.86
Vermont	41.86	32.47	22.26	3.41	42.42	32.99	21.88	2.72	44.19	36.30	16.97	2.54
Virginia	24.57	24.28	22.76	28.39	23.70	23.26	22.54	30.50	24.10	23.88	23.51	28.52
Washington	31.08	29.92	20.22	18.78	31.23	31.49	20.94	16.33	29.66	31.77	20.36	18.21
West Virginia	26.41	23.37	20.57	29.66	25.60	23.03	20.98	30.39	26.16	25.06	20.51	28.27
Wisconsin	24.86	26.92	23.22	25.00	24.87	27.58	24.53	23.02	23.22	26.94	24.78	25.06
Wyoming	47.69	37.00	15.31	0.00	46.81	37.54	13.95	1.70	44.59	39.77	12.49	3.16

Source: SBA Small Business Data based upon unpublished data from the Unemployment Insurance (U.I.) System, courtesy of the Bureau of Labor Statistics.

CHAPTER II

TABLE A2.18—National Income and Persons Engaged in Production by Industry Divisions, 1929–1965

Year or Period	Industry Division										Government	
	Total	Agriculture	Mining	Construction	Manufacturing	Transportation, Communications, Utilities	Trade	Finance, Insurance, Real Estate	Services	Federal	State and Local	Rest of World
National Income												
	Millions of Current Dollars	Percentage Distribution										
1929–37	58,763	9.3	2.1	3.1	22.8	11.2	16.1	12.9	11.4	3.7	6.6	0.8
1937–44	108,684	8.4	2.0	3.5	30.6	9.2	15.8	8.6	8.4	8.9	4.3	0.3
1944–48	191,442	9.2	1.9	3.5	29.4	8.3	17.5	7.8	8.5	10.1	3.6	0.3
1948–53	258,476	7.2	2.0	5.0	31.6	8.5	16.7	9.0	8.8	6.2	4.5	0.5
1953–57	330,092	4.8	1.8	5.2	32.1	8.5	15.7	10.3	9.4	6.4	5.3	0.5
1957–60	386,032	4.3	1.5	5.1	30.5	8.4	15.7	10.9	10.4	6.2	6.2	0.6
1960–65	474,201	3.9	1.2	5.0	29.9	8.3	15.3	11.9	11.2	6.2	7.2	0.7
1965	559,020	3.8	1.2	5.1	30.5	8.2	15.0	10.9	11.3	6.0	7.5	0.8
Persons Engaged in Production												
	Thousands of Persons	Percentage Distribution										
1929–37	42,214	12.3	2.0	4.1	20.5	7.5	16.9	3.5	13.9	3.7	6.4	—
1937–44	53,002	15.1	1.8	4.0	24.4	6.3	16.3	3.0	12.4	11.4	5.4	—
1944–48	59,952	11.8	1.5	4.0	25.9	6.8	16.7	2.9	(NA)	13.5	3.9	—
1948–53	61,110	10.6	1.6	5.6	26.7	6.9	18.1	3.4	13.1	7.7	6.2	—
1953–57	64,496	8.8	1.3	5.6	27.0	6.5	18.0	3.8	13.5	8.4	6.9	—
1957–60	64,798	7.6	1.2	5.5	26.1	6.3	18.6	4.1	15.0	7.6	8.0	—
1960–65	67,620	6.6	1.0	5.5	25.6	5.7	18.4	4.3	16.1	7.6	9.1	—
1965	71,248	5.7	0.9	5.6	25.9	5.6	18.4	4.3	16.5	7.4	9.6	—

NA—Not Available.

Sources: Department of Commerce, Bureau of the Census, October 1966. *Long Term Economic Growth, 1860–1965*.

CHAPTER II

TABLE A2.19—*Index of Business Bankruptcy Filings*

[October 1979 = 100]

1980	Number	(Oct. 1979=100)
January	2,814	126.99
February	2,946	132.94
March	3,284	148.19
April	3,756	169.49
May	3,815	172.15
June	3,874	175.48
July	3,902	176.08
August	3,863	174.32
September	3,888	175.45
October	4,077	183.98
November	3,202	144.49
December	3,953	178.38
1981	Number	(Oct. 1979= 100)
January	3,396	153.25
February	4,037	182.18
March	4,542	205.00
April	4,361	196.80
May	3,770	170.13
June	3,950	178.25
July	3,733	168.46
August	3,568	161.01
September	3,857	174.05

Note: Index based on filings in October 1979 the first month of the implementation of the Bankruptcy Reform Act of 1978.

Total 1980 filings were 43,374. Annualized total based on nine months of 1981 is 46,835.

Source: Data based on unpublished tabulations of the Administrative Office of the U.S. Courts.

APPENDIX B

**THE SMALL BUSINESS DATA BASE
AND OTHER SOURCES OF BUSINESS
INFORMATION: RECENT PROGRESS**

APPENDIX B—THE SMALL BUSINESS DATA BASE AND OTHER SOURCES OF BUSINESS INFORMATION: RECENT PROGRESS

INTRODUCTION

Public Law 96-302 mandates that the Small Business Administration (SBA) Office of Advocacy prepare a small business economic data base to be used for current and historical description and policy analysis. The law requires that the data base be developed without burdening small businesses with additional data collection. The data requirements called for in the law are divided into two parts: the indicative data base for creating mailing lists, and the external data base for descriptive statistics and policy analysis. This appendix summarizes the progress made on the external data base during the past 12 months.

The SBA has outlined an ideal model that could provide complete response to Congressional requests by drawing data from the existing Federal statistical agencies. However, efforts to obtain such data from the Federal Statistical agencies reveal three primary problems: (1) confidentiality statutes prohibit other agencies from providing SBA with access to individual business data (microdata); (2) individual business data are not comparable among agencies, and therefore interagency combining of data is complex and expensive; and (3) statistical agencies lack the incentives to cooperate with SBA.

Moreover, in order to merge various data sets, modifications in data collection and reporting procedures are necessary. Although SBA has a Congressional mandate to obtain their data, statistical agencies have statutes, data comparability problems, and priorities that prevent them from cooperating. Of course, their published aggregated data is available, but aggregated data cannot be used to identify cause and effect relationships, a vital step in policy analysis of small business.

The development of an external data base requires the following actions: building data files on individual companies and establishments, influencing Federal statistical agencies to improve the usefulness of tabulated descriptive data, improving the com-

parability of microdata among agencies, and eventually providing access to microdata. Microdata is purchased commercially from the Dun and Bradstreet Corporation as is the data for the indicative data base. Ultimately a representative sample of the financial and employment data of 200,000 to 300,000 firms will be produced for use in descriptive statistics and policy analysis. The tasks of cleaning the raw data, inputting missing data, developing a sample framework, creating the sample and making the data ready for computer processing are planned and beginning to be implemented. The computerized sample will be ready sometime in fiscal year 1982. Continuing work will be required to update the sample annually and create a dynamic longitudinal file. This data base is the source of most of the statistical information and policy analysis research prescribed by P.L. 96-302.

SBA attempts to improve the usefulness of tabulated data have produced government-wide data tabulation standards. The work to improve comparability of data among agencies has resulted in development of a computerized system to compare and match information based on the data elements common to most data sources: business name and address. Current efforts to improve data collection also include an interagency agreement between IRS and SBA to match employment data from tax sources with the IRS Statistics of Income files. Another issue receiving attention is the problem of confidentiality as it relates to statistics on individual businesses. Additionally, a project designed to build a sample file of manufacturing firms drawn from Census of Manufactures data is lending support to efforts which would provide access to microdata on individual businesses.

Section I of the appendix describes progress with the three Dun and Bradstreet files. Section II describes the other universe type (aggregate) data sources which are used to respond to the questions and needs of the Congress and other users of the data on an interim basis. Section III extends the analysis outlined in the introduction by attempting to more thoroughly integrate the different data sources through the use of some comparative tables. In particular, the Dun and Bradstreet files are contrasted with all of the other establishment and enterprise data issued by Government agencies. Included are definitions of the number of small businesses in the United States based on various sources. Section IV contains a summary and an addendum which describes additional data development projects completed and underway.

SECTION I MICRODATA FILES—THE BASIC DATA BASE

As indicated in the Introduction, data on individual companies (microdata) is not available to the SBA from government sources for responding to requests of Congress as required in P.L. 96-302. Therefore, in order to analyze economic changes for individual firms, SBA has purchased the proprietary files of the Dun and Bradstreet Corporation. Three major Dun and Bradstreet files form the core of the SBA microdata base: The Dun and Bradstreet *Market Identifier File (DMI)*, the *Dun and Bradstreet Trend File*, and the *Dun and Bradstreet Financial Statistics File (FIN/STAT)*.¹

Dun's File Development—The Dun and Bradstreet Market Identifier File (DMI)

Dun's original DMI file presented two important problems. First, the firms in the file are neither a census of all firms in the U.S. nor a random sample. Thus it was necessary to validate or "benchmark" the files against appropriate sources to be sure that the information drawn from the files accurately describes small business in total. Second, the files are not assembled by statistically rigorous data collection procedures, but instead by voluntary cooperation of respondents. Many firms provided incomplete data, and errors arose from a variety of sources. This made the files "dirty". For example, some individual firm records contained missing or obviously incorrect data on one or more items. These records were located and their data "cleaned" or imputed before validating the aggregate data on the file.

The original 1978 DMI file contained information on approximately 4.3 million establishments and 3.7 million enterprises.² Because of the two year lag in collecting information, a 1978 file means that it was actually purchased in 1980. The 1982 file (1980 information) has been received by the SBA and negotiations are in progress to procure a third file with 1976 data. These data would provide a minimum of three data points for trend analysis for each

¹The progress to date on these files is thoroughly documented in "USEEM—The U.S. Establishment and Enterprise Microdata Base—Version I," (Brookings Institution, Washington, D.C.) August, 1981.

²The SBA also has tabulations from the 1969-1976 DMI files. These tabulations were provided by MIT. They are aggregate summaries and based on a file 25 percent smaller than the one now generated.

record in the file. The following information was retained or created:³

1. Dun's number—a number assigned by D&B that is used to match it to data in other Dun and Bradstreet files.
2. Geographic location—county, state.
3. Business age.
4. Annual sales volume.
5. Number of employees—both establishment and enterprise employment.
6. Primary Standard Industrial Classification (SIC) and secondary SIC (if any).
7. Firm industry division.
8. Dun's number of parent and ultimate parent.
9. Complex organization code—single location, top of enterprise, subsidiary or branch.

Table B.1 gives some indication of how the establishment-based DMI compares with other universe-type establishment based data sources. It is most directly comparable to the County Business Patterns (CBP) series of the Census Bureau and the Unemployment Insurance (UI) files of the Department of Labor. However, the DMI is not a file by type of legal organization like the Statistics Of Income of the Internal Revenue Service, and its coverage is less in medical, legal and personal services than CBP or UI.⁴ The DMI has the widest identification of businesses in the small size category (under 100 employees).

³ Additional data is available for each record through the Indicative Data Base which is maintained for SBA by Social and Scientific Systems, Inc. This ancillary file contains information on business name, chief executive, address, phone number, location of parent and headquarters, and manufacturing code. This file is being expanded at Congressional request from 4.7 million to 7.0 million establishments. (The additional names come from yellow and white page type listings). Access to the file will be limited to the selecting of statistical samples for Congressionally sponsored research programs.

⁴ These comparisons are discussed in much greater detail in Bruce D. Phillips, "A Comparison of Three Establishment Based Data Sources: The Dun & Bradstreet Market Identifier File (DMI), the Unemployment Insurance (UI) File, and County Business Patterns (CBP), (Small Business Administration, Economic Research Division, March, 1981), see also Candee Harris, "A Comparison of Employment Data For Several Business Data Sources; County Business Patterns, Unemployment Insurance and Brookings's U.S. Establishment and Enterprise Microdata File, Working Paper No. 5, Small Business Microdata Project, The Brookings Institution, October 1981.

TABLE B.1—Comparison of Total Number of Establishments and Taxpaying Units by 1 Digit SIC Categories

SIC	County Business Patterns (1977)	USEEM (DMI) (1978)	R.L. Polk & Co. (1978)	Statistics of Income (in 000) ^a (1977)			
				(Proprietors)	(Partnerships)	(Corporations)	(Total)
Agriculture, Forestry, Fisheries (01-09)	44,997	107,961	67,489	3,177,180	121,042	65,594	3,363,816
Mining (10-14)	27,755	40,044	16,223	71,151	21,966	19,216	112,333
Construction (15-17)	439,381	577,360	432,969	994,072	69,217	214,745	1,278,034
Manufacturing (20-39)	327,850	538,198	336,201	224,128	27,996	231,149	483,273
Transportation, Communication, Public Utilities (40-49)	166,465	189,283	164,181	385,322	16,837	85,215	487,374
Wholesale Trade	375,077	505,757	468,372	307,245	29,379	237,597	574,221
Retail Trade	1,263,377	1,392,095	1,733,127	1,862,406	163,832	432,815	2,459,053
(50-59), Total	1,638,454	1,897,852	2,201,499	2,169,651	193,211	670,412	3,033,274
Finance, Insurance Real Estate (60-69)	413,128	392,377	472,511	894,941	476,390	432,919	1,804,250
Services (70-89)	1,233,652	955,493	2,757,026	3,302,537	226,638	516,387	4,045,562
Government (90-99)	—	—	20,803	—	—	—	—
Not Allocable	—	—	—	126,634	101	6,250	132,985
Total	4,292,132	4,698,569	6,468,902	11,345,616	1,153,398	2,241,887	14,740,901

Sources: U.S. Dept. of Commerce, Bureau of the Census, *County Business Patterns, U.S. Summary Table 1B*, issued, 10/79 Brookings U.S. Establishment and Enterprise Microdata, unpublished data, 1978, R.L. Polk & Co., "Polk Catalog of Mailing and Prospect Lists," Internal Revenue Service, 1977 *Sole Proprietorship Returns* (GPO, 1981); 1977 *Partnership Returns* (GPO, 1981); preliminary unpublished data was provided by the Statistical Division of the Internal Revenue Service for corporations in 1977.

Note: Detail may not add to total due to nonclassifiable industries.

The Brookings Institution found many problems with the initial DMI for 1978. There was an inconsistency for example, when the establishment employment was summed to the enterprise level. The two figures were substantially different.⁵ Much of the work of the Brookings Institution during the past year has centered on the reconciliation of employment figures in establishments and enterprises. See Table B.2 for an example of this reconciliation. This work has produced a major data source at the four digit SIC level which, for the first time, reconciles enterprises and their component establishments by sub-national area.

Enterprises and Their Component Establishments.

About 35 percent of the enterprises in the DMI are corporations, but the legal form of organization reconciliation will be better understood after employment from the employer quarterly withholding form (IRS Form 941) is transferred into the Corporation File of the IRS. A recently signed interagency agreement with the IRS, using a sample of corporate returns, is now underway. However, this is not a simple project because a company may report to the IRS in several major ways: as a consolidated corporation, by separate establishment, or as a mixture of the two. A report on the matching is anticipated within the near future, and its applicability to the entire corporate portion of the Business Master File (BMF) of the IRS will then be judged.

Dun's Trend File

As a subset of the DMI, the Trend File consists of a set of variables for approximately 600,000 enterprises (companies). About half of the records have data from the 1978 file, while the remaining half have records from the 1980 file. Essentially, the file contains sales and employment information for each company in a base period five years previous to the current observation. The component variables in the trend file for each company follow:

Industry Division Code
Pointer to DMI File

⁵ Disaggregating the enterprise employment of the top of each business family revealed the existence of many branch establishments which were not yet listed in the DMI. Records for these establishments were subsequently added to Brookings U.S. Establishment and Enterprise Microdata File.

TABLE B.2 Number of Establishments and Number of Enterprises by Enterprise Employment Size Class* (1978)

	4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000-4999	5000-9999	10000+	Total ¹	Size not Classified
(1) Agriculture, Forestry, Fishing													
Estab.	66,452	21,066	9,651	5,240	1,721	1,299	716	439	778	301	294	107,961	5
Enterp.	63,210	19,505	8,230	3,943	998	478	133	42	30	4	1	98,578	4
(2) Mining													
Estab.	12,391	5,857	5,033	4,263	2,032	1,922	979	791	2,662	512	3,595	40,044	7
Enterp.	12,011	5,103	3,929	2,688	872	488	134	72	66	7	19	25,396	7
(3) Construction													
Estab.	369,295	94,386	51,000	30,716	10,322	7,443	3,605	2,505	3,952	1,409	2,659	577,360	68
Enterp.	365,764	90,055	47,115	26,353	7,048	3,160	722	280	150	19	15	540,749	68
(4) Manufacturing													
Estab.	121,603	76,612	61,370	60,085	31,313	29,590	17,493	15,010	33,041	13,767	78,277	538,198	37
Enterp.	119,266	72,033	55,032	48,947	20,535	12,797	4,291	2,014	1,630	252	389	337,223	37
(5) Transportation, Commun., Util													
Estab.	64,420	31,550	22,351	17,401	8,199	7,563	4,350	4,552	11,327	4,710	12,822	189,283	38
Enterp.	63,126	28,721	18,550	11,732	3,690	1,927	553	314	314	54	61	129,081	39
(6) Wholesale Trade													
Estab.	194,527	101,859	64,748	48,554	20,134	16,508	7,658	5,099	7,068	2,140	2,535	470,873	43
Enterp.	189,891	92,070	51,499	28,815	7,288	3,087	708	257	156	11	9	373,834	43
(7) Retail Trade													
Estab.	697,985	290,360	153,207	106,495	41,738	33,976	18,196	14,726	28,862	11,756	29,565	1,426,979	113
Enterp.	685,487	261,351	120,680	70,165	17,849	6,416	1,379	606	440	80	84	1,164,650	113
(8) Finance, Ins., Real Est													
Estab.	160,306	52,859	34,682	30,695	18,451	20,741	13,736	12,044	25,753	10,052	13,023	392,377	35
Enterp.	156,490	47,337	28,448	17,941	6,216	3,519	1,128	566	524	83	45	262,332	35
(9) Services													
Estab.	486,640	168,128	93,393	65,812	32,518	31,208	18,272	13,400	24,863	9,728	11,452	956,493	79
Enterp.	479,411	155,310	78,511	48,537	19,601	13,650	4,855	2,682	2,080	207	110	805,033	79
All Industry Totals													
Estab.	2,173,619	842,677	495,435	369,261	166,428	150,250	85,004	68,566	138,306	54,375	154,222	4,698,568	425
Enterp.	2,136,656	771,486	411,994	259,121	84,097	45,522	13,903	6,833	5,390	717	733	3,736,877	425

Prepared by the Brookings Institution using the Small Business Data Base

¹ Totals include enterprises and establishments not classifiable by size class

*Data are classified comparable to those found in the *Enterprise Statistics* publication of the Bureau of the Census. That is, both establishments and enterprise are classified according to the major industry division of their payroll. This means, for example, that although a multi-establishment corporation may manufacture many products (G.M. makes refrigerators), all of G.M.'s establishments will be classified under SIC 37-transportation equipment.

and⁶
1973 Base Year Sales
1973 Base Year Employment
1978 Trend Year Sales
1978 Trend Year Employment
or
1975 Base Year Sales
1975 Base Year Employment
1980 Trend Year Sales
1980 Trend Year Employment

Of particular interest in the above list is the second item, "Pointer to DMI File". This is one of a set of pointers which link a business' record in one D&B file to its data in another file. Essentially this means that when a company record from the DMI establishment file is read, it will indicate whether a trend observation is also available. U.S. Employment and Enterprise Microdata, referred to earlier, contains a list of the tests and cross tabulations which have been run using this file.

The Dun and Bradstreet Financial Statistics File—FIN/STAT

The Dun and Bradstreet FIN/STAT File began in 1975 with the collection of 155,000 financial statements of corporations and now contains approximately half a million statements per year (after removal of duplicates). The basic data items in the statements are detailed in the footnote below.⁷ Most of the major categories of current and non-current assets and current liabilities are included. These statements are the only source of simultaneous information on three major classification variables: assets, sales, and employment. Data can be tabulated by any or all of the three variables depending upon the application. Data are also included on tangible net worth and profits after taxes for the companies.

⁶The 1978 and 1980 Trend Files actually contain observations from 1977, 1978, 1979, 1980, and 1981 depending on the processing cycle used to enter the data and the fiscal year closing date for each firm. Base year data may cover all or part of 1972, 1973, 1974, 1975, and 1976.

⁷Current assets include the following: cash, accounts receivable, inventory, notes receivable and other assets. Non-current assets include fixtures, other fixed assets, real estate, value of life insurance, and other non-current assets. Current liabilities include accounts payable, bank loans, notes payable, and other current liabilities. Non-current liabilities include mortgages, amortized liabilities, non-amortized liabilities, and deferred credit items.

Two distinct efforts are underway to develop the FIN/STAT files. First, under Brookings Institution's Small Business Microdata Project, the FIN/STAT for 1978 has been checked for errors and edited for data consistency in the categories of total assets and liabilities. This edited version of the FIN/STAT, which contains a smaller number of financial variables than the original file, has been linked to the comparable records in the DMI File in constructing the U.S. Establishment and Enterprise Microdata File (USEEM).⁸ The second research effort on the FIN/STAT focuses on the historical files from 1975 to 1980 and is described below.

Developmental work with the historical FIN/STAT to date has involved checking the availability of statements (See Table B.3), and testing the validity and consistency of the information in the statements.⁹ Test results have been promising. For example, for the sample of 507,000 financial statements for 1978, 73.7 percent of them were for companies of 0-19 employees, and another 20 percent were for companies of 20-99 employees. Therefore, to the extent that the company representation in the FIN/STAT approximates the universe of all businesses, SBA appears to have a sufficiently large data base from which to draw policy relevant samples.⁹

The results of checking the consistency of the total assets and liabilities categories in the historical files have been encouraging. In general, the detailed components of assets and liabilities sum to their respective totals 70-85 percent of the time; the percentages of correct statements decline by about 10-15 percent as size rises from 1-19 employees to more than 10,000 employees. In addition, total assets and total liabilities balance about 95 percent of the time. The main point here is that the FIN/STAT file has the potential to be very useful for simulating proposed changes in small business tax policies.

Little effort has been expended on observing the extent to which longitudinal information is available since basic work is still being done to check the files for errors. Of the approximately 500,000 nonduplicated statements in the file each year, there appear to be between 33 percent and 45 percent with at least two or more years of information. Contracts have been awarded to study in four digit SIC detail the availability and quality of longitudinal information and to determine what kind of imputations need to be made with

⁸See "USEEM ... Version 1", previously cited.

⁹Approximately 52 percent of the companies in the FIN/STAT Files are corporations.

TABLE B.3 1978 Financial Statements By Size Class By Major Industry
in the FIN/STAT Historical File

Division	Size Class					Unknown	Totals	Percentage
	0-19	20-99	100-499	500-9999	10,000+			
Agriculture	5,837	1,070	202	43	1	16	7169	(1.4)
Mining	2,402	972	306	140	34	10	3864	(0.8)
Construction	50,975	12,188	1,972	268	18	59	65480	(12.9)
Manufacturing	33,081	21,531	7,826	2,723	383	91	65635	(12.9)
Transportation	13,765	6,672	1,652	729	94	57	22969	(4.5)
Wholesale Trade	59,042	14,585	1,963	355	13	109	76066	(15.0)
Retail Trade	144,402	22,065	2,954	790	91	150	170452	(33.6)
Finance	16,878	6,710	2,761	1,115	69	59	27592	(5.4)
Services	47,556	11,555	4,987	2,204	67	127	66496	(13.1)
Public Administration	254	352	483	368	31	4	1492	(0.3)
Non-Classified	15	13	6	17	4	20	75	(0.1)
Totals	374,207	97,713	25,111	8,752	805	702	507,290	
(Percentages)	(73.7)	(19.3)	(5.0)	(1.7)	(0.2)	(0.1)	(100.0)	

Source: Small Business Data Base.

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the file. For example, separate items or entire financial statements for missing years can be imputed, assuming the data shows much stability.

To produce a financial simulation system, the tax payments and depreciation of each company will have to be added to the FIN/STAT records. Although the Tax Reform Act of 1976 forbids passing this missing data directly from IRS to SBA, a third party type arrangement is being studied as an alternative. Additionally, the Dun and Bradstreet Corporation is studying the feasibility of obtaining this information from the source documentation of its field investigators.

Matching and Sampling the Dun and Bradstreet Files

Based upon the work of the Brookings Institution (refer to "USEEM Version I") all of the establishments in the original unedited 1978 DMI file have been reconciled into their enterprise families.¹⁰ This is a major achievement given the complexity of branch and subsidiary relationships. Each of the three major Dun's files, the DMI, the Trend File, and the FIN/STAT file, now have pointers to each other indicating the availability of information for comparing records (See Table B.4). Furthermore, the original data have been corrected and augmented to provide complete reporting of establishment and firm employment and complete sales data for all enterprises and subsidiaries.

Within the next year, SBA expects to have a totally integrated and weighted sample of 200,000-300,000 enterprises. Data will include financial, employment and sales figures for as many years as possible. It will be necessary to turn to other aggregate data sources in the interim to validate the work with the Dun's files, and to provide a source for reweighting the files in those areas which underrepresent small business.

Development of Establishment and Enterprise Longitudinal Files

The edited and augmented DMI files for 1978 and 1980 are being linked together by the Brookings Institution to form a longitu-

¹⁰ The interagency agreements with IRS referenced above include study of how comparable the taxpaying unit is with the enterprise concept in IRS Form 941. See, in particular, Catherine Armington and Marjorie Odle, "Associating Establishments and Enterprise For a Microdata File of the U.S. Business Population." Working paper No. 4 (Brookings Institution) Revised July, 1981. Published in *Statistics of Income and Related Administrative Record Research*, (U.S. Department of the Treasury, GPO, October 1981).

TABLE B.4 *Small Business Data Base*
Industry Division Files

Number of Records in Component Files

Industry Division	Establishments	Matched Financial Statement	Matched Trend Dates
1 Agriculture	107,961	13,731	9,297
2 Mining	40,044	5,981	4,823
3 Construction	577,360	109,932	93,092
4 Manufacturing	538,198	102,307	134,551
5 TCPU*	189,283	35,974	30,669
6 Wholesale Trade	505,757	117,875	139,573
7 Retail Trade	1,392,095	285,295	390,567
8 FIRE*	392,377	46,196	10,027
9 Services	955,493	119,073	91,288
TOTALS	4,698,569	836,364	688,715

*TCPU = Transportation, Communications and Public Utilities

FIRE = Finance, Insurance and Real Estate

Source: Unpublished data, "USEEM—United States Establishment and Enterprise
Microdata—Version 1 (Brookings Institution, Washington, D.C., December, 1981).

dinal file of *establishments*. It is anticipated that within six months the integration of the 1976 DMI file will provide the capability of tracing establishment microdata on employment and other characteristics for the period 1976–1980.

Simultaneously, an SBA contractor is designing alternative systems for structuring a longitudinal *enterprise* file. Devising a system which will facilitate the study of changes in corporate structure, acquisitions, divestitures, mergers, etc. presents complex problems. This grant provides for the construction of a prototype longitudinal enterprise file for the manufacturing industry.

SECTION II OTHER AGGREGATE DATA SOURCES USEFUL FOR SMALL BUSINESS ANALYSIS

This section consists of two major tables. The first is a fairly complex table which compares the definitions and coverage of the Dun and Bradstreet microdata files with other aggregate sources of small business statistics. The second attempts to define "the" number of small businesses in the United States from several of the data sources listed in Table B.5.

In table B.5, applicable small business micro and macro data sources are contrasted. The integration of these sources by firm is made more difficult by legislated access provisions which prohibit sharing microdata among government agencies. This situation will

TABLE B.5 *Micro and Macro Data Sources In The Small Business Data Base By Size Class*

Type:	Source:	Variables:	Geography:	Industry:	Years:	Legal Form of Organization:	Comparable With Other Aggregate Source:	Comment:
I. MICRO								
a. Establishments (4.7 million)	Dun & Bradstreet Market Identifier File (DMI) with branches imputed for consistency	Employment & Sales, Age, Branch & Subsidiary Relations, Size of Firm	U.S., States, Counties	Excludes Self-Employed, Gov't 4 Digit SIC Available, also Secondary SIC & Industry of Firm	1978/79; 1979/80 in Preparation 5 Year Trend on 1/5 of Records	Corporations, Partnerships, and Sole Proprietorship	For Emp. (only) County Business Patterns (Census); Unemployment Insurance (U.I.) Data (Bureau of Labor Statistics).	Major Identification is Dun's Number (9 Digits)
b. Enterprises (3.7 million)	Same	Sales, Employment	U.S., States, Counties	Same; 4 Digit SIC Available	Same	Same	IRS Statistics of Income (SOI); Enterprise Data From Census	Same
c. Enterprise (2 million)	Dun & Bradstreet Financial Statement File	Employment, Sales, Assets, Balance Sheet Items	U.S., States, Counties	Same; 4 Digit SIC Available Excludes Banks	Up to Five Years 1976-1981 But Many Are Not Consistent	Same	Employment With Enterprise Statistics; Sales, Assets, with SOI for Corporations, Partnership and Sole Proprietorship.	Balance Sheet Information for about 500,000 companies per year-about 22% sample of the Coverage of b Above
II. MACRO								
a. Establishments (4.4 million) as of 1977	County Business Patterns (Census) (CBP)	Employment, Payrolls	U.S., States, Counties	Same; 3 Digit SIC Available Excludes Railroads	1954-Present	Incorporated and Unincorporated establishment with employees	Dun & Bradstreet (DMI), U.I. Data	Identification is EIN (Employer Identification Number)
b. Reporting Units	Unemployment Insurance ES202 (U.I.) data	Employment, Payrolls	U.S., States	Excludes Farmers, Railroad Workers, Some Gov't. Basically Non-ag. Non-gov't.	1969-1979	Same as Above	DMI, CBP	Reporting Units can be groups of establishments or EINs within the same county
c. Establishments (3.7 million)	Dun & Bradstreet (DMI)	Employment, Sales	U.S., States, Counties	Excludes many large Establishments, Many Branches, and Much of Services Sector	1969-1976	Same as I.a.	Same as I.a.	This data file was aggregated by Prof. David Birch-MIT, it is "The Job Generation Process" file.
d. Enterprises (5.6 million as of 1977)	U.S. Dept. of Commerce, Bureau of the Census, Enterprise Statistics	Employment, Payroll, Sales, Value Added (Mfg), New Capital Expenditures (Mfg), Inventory (excl. Retail Trade, Services)	U.S. Only	Excludes Agric; Transportation Communication Utilities; Finance Insurance, and Real Estate; Part of Services	1958-1977	Corporations, Proprietorships, Partnerships, (Mining Mfg, Construction, Wholesale, Retail Trade, Selected Services Only)	DMI Enterprise File for Covered Industries; IRS Statistics of Income for Covered Industries Only	Includes (Partially) Inc. Proprietorships and Partnership as well as Corporations
e. Enterprises (All Companies with More Than 100 Employees; 168,000 in 1979)	Equal Employment Opportunity Commission EEO-1 file (1979)	Employment by Major 1 Digit Occupation by Company Size (Single and Multiple-unit Companies are shown Separately)	U.S. Only	Excludes Farms, Govt, Self-employed, all Companies Under 100 Employees Unless They Have a Federal Contract Worth \$50K or More. 2 digit Industry Detail Only	1974-1980	Corporations		Only Source of Demographic Data on Small Business Available to SBA. No Alphabetical Identification of Individual Companies is Available.

TABLE B.5 (Continued)—Micro and Macro Data Sources In The Small Business Data Base By Size Class

f. Enterprises or Establishments (1.0 mil. or 1% sample of Social Security Numbers)	Social Security Administration, Continuous Work History Sample (CWS)	Age, race, Sex, Industry. Quarterly Wages, Size Approximation	U.S., States Counties	Excludes Govt., Self-employed	1960-1975		Employment totals are generally comparable with IRS statistics of income for Corporations	Size is defined from randomly reading IRS Form 941 and counting the number of employees.
g. Self-employed (1% Sample)	Social Security Administration (CWS)	Wages, Industry, Sex, Race, Age, Composition of Self-Employed	U.S., States, Counties	Excludes Govt., Railroads	1960-1975	Proprietors, and partners	Proprietorships from Statistics of Income	Based on IRS form 1040SE (self-employment contributions)
h. Statistics of Income-Proprietorships (11.3 million as of 1977)	Internal Revenue Service	Sales (Receipts), Complete Profit and Loss Items	U.S., States	Excludes Govt.	1948-1977 (Latest)	Proprietorships—(Self-employed) with or without employees	Social Security 1% Continuous Work History Samples (CWS)	Schedule 1040C Tax Returns and Others including Self-employment income reported on the 1040
i. Partnerships (1.2 million as of 1977)	Internal Revenue Service	Sales (Receipts), Complete Balance Sheet Items Every Other Year.	U.S., States	Excludes Govt.	1948-1977	Partnerships		IRS Form 1065 or IRS Form 1040
j. Corporations (2.2 million as of 1977)	Internal Revenue Service	Sales (Receipts Assets) Balance Sheet Items.	U.S. only	Same	1948-1977	Corporations	Compatible with Enterprise Statistics for Corporations.	Corporation can file taxes either as an entire Co. (consolidated) or as separate entities (Establishments)
k. Corporations—(Sample of Corporate Tax Returns—about 250,000)	Internal Revenue Service, Source Book for Corporations (IRSCSB)	Complete Balance Sheet Information	U.S. Only	Excludes Self-Employed, Government	1968-1977	Corporations	Dun and Bradstreet Financial Statistics File (FINSTAT)	Many asset items are comparable to FINSTAT. However, the reporting units are not necessarily comparable. FINSTAT stresses additional balance sheet items, particularly for liabilities. IRSCSB stresses the expenses involved in production. Other major difference: FINSTAT has no depreciation and tax information.
l. GNP Share of Small Business	Joel Popkin and Company	Based on Payroll and Sales Data from Enterprise Statistics and Statistics of Income.	U.S. and Selected States	Excludes Agriculture	1963-1976	Closest to Corporations	Bureau of Economic Analysis National Income Accounting Definitions	Major Components are employment compensation, net interest, profits, capital consumption allowances, and indirect business taxes. Estimates for Co. with 500 employees or less.

be clarified somewhat when interagency projects underway report how differences in reporting units affect data quality.

Comparisons With Employment as the Matching Variable

Table B.5 shows those sources which are most directly comparable with the three Dun and Bradstreet files. However, these comparisons must be made separately for employment, sales and assets, because conventional Government data sources (IRS, Census, BLS, etc.) do not tabulate data for all three of the classification variables. For example, IRS statistics are tabulated by sales or assets, but not employment; Census data are tabulated by employment or sales, but not assets. This makes tabulations and cross tabulations on all three major variables impossible from one comprehensive Government source.

For employment, the Dun and Bradstreet Market Identifier (DMI) file, on an establishment basis, may be compared with either County Business Patterns (CBP) of the Census Bureau or the Unemployment Insurance (UI) Files of the Bureau of Labor Statistics. However, as shown in the table, only the DMI contains data on variables such as age of the business, secondary SIC codes, trend information, and, at the state and county level, four digit industry detail. In contrast, the DMI does not contain information on payrolls; it is also less useful (in raw form) as a source for information on service firms.

The DMI, while of greater breadth than the other establishment based sources, is currently of limited use for time-series analysis. As mentioned above, SBA expects to construct a longitudinal establishment file for the years 1976 to 1980. In the interim, the CBP is a useful source for analysis of the historical distribution of employment by size class of establishment.¹¹ For establishments only, and only on a summary (aggregate) basis, the DMI historical tabulations for 1969 to 1976 from MIT are available. These tabulations (described in greater detail in II. C in Table B.5) contain some data on the employment effects of establishment births, deaths, expansions, contractions, and net migration.

On an enterprise basis, the DMI may be compared with the quinquennial *Enterprise Statistics* of the Bureau of the Census and the *Corporation Source Books* of the Internal Revenue Service (including

¹¹ Efforts to obtain access to the microdata of the CBP (maintained by the Census Bureau in its Standard Statistical Establishment List) to match it precisely against the DMI have thus far been unsuccessful.

summary tabulations from the *Statistics of Income for Corporations*). The *Enterprise Statistics* (see Table B.5) published every five years does not cover two important industries: the financial sector and the transportation/communication sector. The service sector is also only partially covered by *Enterprise Statistics*.¹² Therefore any comparisons which are made between the enterprise version of the DMI, and *Enterprise Statistics* must be specific to the manufacturing, trade, construction, and mining sectors. However, for those industries for which comparisons can be made, the number of companies in the DMI Enterprise File and those in the Census Enterprise Statistics are within 10 percent of each other (DMI generally is larger.) Additional documentation on these various differences has been prepared by the Brookings Institution and is available upon request.¹³

Because the IRS Statistics of Income File does not contain data on company employment, it is not possible to compare IRS employment data with that of the DMI. As discussed above, an interagency agreement between IRS and SBA has been signed to transfer employment data to the IRS Corporate File on a sample basis. This feasibility study will be finished within the near future and will represent a major step forward in making IRS data more useful and more comparable to the Dun and Bradstreet Enterprise Files.

It should also be mentioned that the Census' *Enterprise Statistics* contain data on the legal form of organization for those industries which are covered. However, the relationship with IRS and DMI data is not totally clear. About 66 percent of the companies in *Enterprise Statistics* are sole proprietorships while the percentage of corporations is about 23 percent.¹⁴ The corporate percentage of the DMI file is much higher. There is a reasonable consistency between the legal form of organization from Enterprise data and IRS data since the basic source is similar. IRS data are, however, larger absolutely.

It should be mentioned that only the enterprise file of the USEEM has geographic detail below the U.S. level.¹⁵ Corporations

¹² Only pieces of major service enterprises are covered. For example, of the large 2 digit category, health services, only dental laboratories are covered.

¹³ See Candee S. Harris, op. cit.

¹⁴ The remainder, according to the Census Bureau, are "partnerships" and "other".

¹⁵ Neither the *Statistics of Income* of the Internal Revenue Service nor the *Enterprise Statistics* of the Census Bureau show corporate data by state

by state are not published by the IRS principally because of the difficulty in identifying the various branches and subsidiaries included in each tax return; these cross state lines. Because the USEEM enterprise file has reconciled all branches and subsidiaries of each corporate family, this problem has been eliminated. State enterprise tabulations (by size class and major industry division) are available upon request.

Comparisons With Sales as the Matching Variable

As shown in Table B.5, sales data can be compared on an enterprise basis. On an enterprise basis, sales data are available from the DMI, from *Enterprise Statistics*, and from the *IRS Statistics of Income*. Of the three sources, the DMI is the most current (1978 data) and the only source with data available below the national level. *Enterprise Statistics* provides sales information on partnerships, proprietorships and corporations in covered industries, but these are totals; there is no sales distribution as in the DMI. The *IRS Business Income Tax Returns* provides sales distributions for proprietorships and partnerships, and in the *Corporation Income Tax Returns* for corporations. However, the DMI remains the only source of distributional information for sales below the national level.

Efforts are made from time to time to define "the number of small businesses" in the United States based upon sales data. Clearly this is less satisfactory than using employment as a definitional source because of changes in sales data caused by inflation. While there are no standards to describe what constitutes a small business in terms of sales, Table B.6 gives some rough correspondence between sales and employment categories. In general, all proprietorships and partnerships with less than \$5,000 in annual sales are excluded from the definition of small business. The purpose of such an exclusion is to define a realistic standard for a viable full-time business. This exclusion, for example, tends to omit professionals who consult, and many others with part-time attachments to the labor force such as babysitters and sales representatives. For example, of the 11.3 million proprietorship returns filed in 1977, only 7.3 million (or 61.3 percent) had \$5,000 or more in gross receipts.

Usually a figure between 10 and 25 million is used to define the upper limit to the receipts size of a "representative small business". Ten million may be more representative of retail and service enterprises, but perhaps somewhat less representative of manufacturing enterprises. These businesses tend to be larger, on average, be-

TABLE B.6—*Comparison of Standard Employment and Asset, Tabulation Categories With Those Available From the IRS Corporate Source Book*

Type of Business	Employment ¹	Sales/Assets ¹	IRS Corporate Source Book Asset Categories
		(000)	(000)
Family	0–4	0–499	(1–99)+(100–249)+(250–499)
Small-Small	5–19	500–2,499	500–999
Small-Medium(1)	20–49	2,500–4,999	1,000–4,999
Small-Medium(2)	50–99	5,000–9,999	5,000–9,999
Small-Large	100–499	10,000–24,999	10,000–24,999
Large	500–999	25,000–49,999	25,000–49,999
Large-Medium	1,000–4,999	50,000–249,999	(50,000–99,999)+(100,000–249,999)
Govt. Sized	5,000+	≥250,000	≥250,000

¹A more detailed version of these size classes was adopted by the Inter-Agency Committee on Small Business Statistics, and published in the *Federal Register* for comment December 1980 and in the *Statistical Reporter*, August, 1980.

cause of scale requirements.¹⁶ This issue is further discussed in Section III below.

*Available Financial Data and Balance Sheet Type Information:
Comparisons with the Dun and Bradstreet Financial Statistics File
(FIN/STAT)*

The major strength of the SBA microdata base lies in its potential ability to perform financial simulations by business size. The Internal Revenue Service's *Source Book for Corporations* (IRS/CSB) remains the only major publication for which selected comparisons can be made with FIN/STAT. (See table B.7) The *Source Book* is, however, tabulated only on a major industry (two digit) basis from samples, and is therefore less useful for detailed industry (four digit) analysis.

As shown in Table B.7, the FIN/STAT is comparable to a standard accounting balance sheet. While some of these variables are fully comparable with the IRS data (such as the components of

¹⁶Exact data matching employment and sales size is available upon request by industry and sub-national areas.

TABLE B.7—Availability of Specific Variables (by Asset & Size Class):
Dun and Bradstreet Financial Statistics File (FIN/STAT)

U.S.

The Corporation Source Book of the Internal Revenue Service (IRS/CSB)

Variable/Source	FIN/STAT	IRS/CSB
Current Assets, Total	x	x
Cash	x	x
Accounts Receivable	x	x
Inventory	x	x
Notes Receivable	x	x
Other Assets	x	x
Non Current Assets, Total	x	concept is depreciable assets
Fixtures & Equipment	x	
Other Fixed Assets	x	net intangible assets
Real Estate	x	Land
Value of Life Insurance	x	—
Other Non-Current Assets	x	x
Accumulated Depreciation	—	x
Depletable Assets	—	x
Current Liabilities, Total	x	—
Bank Loans	x	—
Notes Payable	x	under 1 yr & over 1 yr
Other Current Liabilities	x	x
Loans From Stockholders	—	x
Non Current Liabilities, Total	x	—
Mortgages	x	x
Ammortized Liabilities	x	see under deductions
Other Non-Current Liabilities	x	" " "
Deferred Credit	x	—
Stock (value)	x	x
Net Worth	x	x
Net Sales	x	x
Profit Before Tax	x	Net Income
Profit After Tax	x	x
Employees	x	—
Total Net Worth	x	—
Total Liabilities and Capital	x	—
Capital Surplus	—	x
Retained Earnings	—	x
Rents, Mortgages, Other Interest	—	x
Net Short Term Gain-	—	x
Net Long Term Loss	—	x
Dividends, domestic corporations	—	x
Total Deductions	—	x
Cost of Sales	—	x
Compensation of Officers	—	x
Rent Paid	—	x
Taxes Paid (other)	—	x
Interest Paid	—	x
Depreciation	—	x
Depletion	—	x

TABLE B.7—Availability of Specific Variables (by Asset & Size Class):
Dun and Bradstreet Financial Statistics File (FIN/STAT)—Continued

US.

The Corporation Source Book of the Internal Revenue Service (IRS/CSB)

Amortization	—	x
Income Tax (before credit)	—	x
Income Tax (less credit)	—	x
Cash Flow Per \$ of Sales	—	x
Cash Flow Per \$ of Assets	—	x
Sales Per \$ of Assets	x	x
Foreign Tax Credit	—	x
Win Credit	—	x

Note: A dash (—) indicates that the item is missing in the respective source.

current assets), others are much less comparable (such as the components of non-current liabilities). The IRS/CSB contains many items which are really deductions from income in tax terms. As shown in the table, these include taxes and interest paid, and the direct cost of sales, among others. While these additional items are useful, they are not accounting definitions.

SBA contractors will be examining the IRS/CSB and FIN/STAT comparability at the two digit level for those items which are comparable. This work should be completed within six months. Imputations to the FIN/STAT from the IRS/CSB of taxes and depreciation will require at least another year before tests of such a system are complete.¹⁷

Quarterly Financial Report

While not listed in Table B.5, the *Quarterly Financial Report* (QFR) published by the Federal Trade Commission should be mentioned because, while it is a limited sample of only three major industries, trade, mining, and manufacturing, it is the only source of quarterly financial information on small business in the U.S. Unfortunately, some of the financial variables are defined for companies with an asset size of \$1–5 million, while others are tabulated for firms with assets of less than \$10 million. Data by sales size are sometimes also available, but data by employment size are not.

The QFR data on profits has made it possible for SBA to conduct

¹⁷ Dun and Bradstreet has proposed a study to return to the original source documents of their field investigators to retrieve the tax and depreciation items.

a study which demonstrated that small profit declines in large manufacturing businesses during the 1974-76 recession were accompanied by much larger profit declines in the small business sector during the same period.¹⁸ The QFR is more limited in size than either FIN/STAT or the IRS/CSB. Yet for the trade, mining, and manufacturing sectors, it produces useful and current (although non-comparable) financial information on small firms.¹⁹

Other Major Entries in the Database System: Demographic Characteristics by Business Size

The ideal data base would have characteristics of workers in each of the 3.7 million companies and 4.7 million establishments in the Dun and Bradstreet DMI. Unfortunately, because Dun's collects no information on the characteristics of the workers in the establishments and enterprises in their files, other sources of information must be substituted.

There are only two major data sources available on the characteristics of the labor force in business firms by size class. They are the files of the Equal Employment Opportunity Commission (EEOC) and the Social Security data from the Continuous Work History Sample (CWHS). The EEOC files provide occupational data by size of company for single and multi-unit companies with 100 employees or more. The CWHS, a longitudinal file of workers, provides worker age, sex, race, industry, quarterly earnings and approximate size of reporting unit for 1960-1975. As is true with virtually all of the reported sources, these files provide some information by firm size on the characteristics of workers, but are not comparable with each other, nor with the Dun and Bradstreet based data files. (See Table B.5, II E. and II F.)

The EEOC file provides no data on wages or payrolls, and does not survey more than the largest quartile of the small business pop-

¹⁸The small business sector was defined as businesses in manufacturing (only) with alternately less than \$5 million and \$1-10 million in assets. See Meir Tamari, "The Effect of Changes in the Business Cycle on Small Firms." Conducted under SBA purchase order #81-474, May, 1980.

¹⁹Congress asked the FTC to reduce the paperwork burden it was placing on small business. In response, the FTC reduced its sample size and simplified its form. As part of the form change, SBA has requested collection of employment data. Questionnaires on these changes were sent to small business leaders who showed no objection to the additional item. If employment data are added, the QFR will be more useful for examining the sales, assets, and profits of small business. The FTC asked for employment data beginning in October, 1981.

ulation.²⁰ The file is, however, very useful for examining how the skill usage of the labor force varies by major industry and size class. The EEOC data shows that smaller firms employ a disproportionate number of lower skilled workers compared to larger firms.

From the CWS file, which provides only an approximate determination of the size class of the workers,²¹ it is possible to trace how workers migrate by industry and firm size over time. As this file is further developed, it can be determined, for example, how individual wages vary by size class. The usefulness of job training programs can also be analyzed. The file, however, is an employee file (without the skill level of the worker) and therefore not arrayed by enterprise. While the EEOC files are useful for skill comparisons by size and the CWS files are useful for wage comparisons by age, sex, race and approximate size of the worker's establishment in the latter case, neither file is an ideal solution to the "string" of worker characteristics that should be appended to the Dun and Bradstreet Enterprise and Establishment Microdata Files.

In an effort to understand skill usage by major industry, the SBA has funded a study to determine how workers upgrade their skills and wage rates as they move among different sized firms. The research will test the hypothesis that workers acquire training in smaller firms, leave those firms with increased skills, and then seek employment in larger firms at higher wage rates.

Clearly more data are needed. Complete information on the occupational skill utilization of the labor force by size of firm would be available if EEOC expanded its survey to include all businesses or if the Census Bureau surveyed those EEOC did not. When the interagency agreement with IRS is completed to study the employer reporting on Form 941, researchers will understand more precisely what the size determination means which results from the Statistics of Income-Form 941 match.

Other Macro Economic Indicators: Payroll Data, GNP Shares, Investment Data

As indicated in Table B.5, there are three sources of payroll

²⁰ This population is defined below in Section III.

²¹ This is because the size determination of the establishment comes from tracing the worker through the IRS Form 941 which the *employer* files. The 941 may be filed by enterprise or establishment or some combination. Currently researchers are examining ways to resolve this problem.

data, two which are establishment based, County Business Patterns (CBP) and Unemployment Insurance data, and one which is based on enterprises, Enterprise Statistics. Of the three sources, the CBP data is the most comprehensive and consistently defined in terms of its reporting unit. Enterprise data is useful if the companies of interest are in one of the covered sectors: mining, manufacturing, wholesale trade, retail trade, and selected services. Of course, in all the sources, the payroll per employee figures which can be derived from the data do not reflect any of the important characteristics like weeks or hours worked across industries. This reduces the validity of most inter-industry comparisons.

GNP Share

Annual industry estimates of Gross National Product for small and large business have been computed for the first time. The time series starts in 1955 and ends in 1976. Small business is defined as fewer than 500 employees, and medium and large business is defined as 500 or more employees.

Annual data has been developed for the smallest size businesses (less than 20 employees) and government size businesses (5,000 or more employees), although with less industrial detail. In addition work is underway to complete this project and break data down by states.

In most ways this data does not compare to the rest of the SBA Data Base because it is an applied data generation project. The basic sources for this work were the Census' *Enterprise Statistics* and the *Statistics of Income* of IRS. The non-employee compensation shares of gross product originating came from the Bureau of Economic Analysis. The output of this project is descriptive (aggregate) data which has been uniquely derived and which can be referenced much like other aggregate sources. It is a unique descriptive database for examining the small business component shares of Gross National Product.

Investment Data

From *Enterprise Statistics*, and for the manufacturing sector only, data on value-added, inventories, and new capital outlays are all available. Because the data is limited to manufacturing only, it is really not a part of SBA's comprehensive data base.

SECTION III. ALTERNATIVE DEFINITIONS OF SMALL BUSINESS

Small business definitions are included in this appendix in order to explain the legal relationships among the establishments and enterprises in the Dun and Bradstreet DMI and FIN/STAT files. The DMI is essentially a file of all establishments and enterprises with employees. Less than 0.1 percent of all the entries in the files contain no employees.

About 35 percent of the business enterprises in the DMI file are corporations. (See Table B.8 Footnote 1.) The remaining 2.48 million enterprises are either partnerships or proprietorships. While no precise distinction exists in the latter cases, these distinctions are important in understanding the precise coverage of the data base. For example, while about 2.2 million corporate tax returns are filed with the IRS every year, the number of corporate enterprises in the DMI is 1.2 million, or about 55 percent of all corporate returns. Due to imprecise knowledge on whether companies file partial or consolidated returns, however, the statement of 55 percent is also necessarily imprecise; it could be much higher if the percentage of non-consolidated returns is higher.

The problem of defining a working "full-time" business entity is a continual problem. As shown in Table B.8, the percentage of proprietorship and partnership tax returns with less than \$5,000 in annual receipts runs in the 43 percent range. This group has been excluded from the definitions in the Table on that assumption that entities with less than \$5,000 in receipts are not businesses of concern for national policy. Obviously, this assumption requires further study.

The proper qualifying employment size range of an establishment or enterprise to define it as being "small" is relative to factors such as concentration, industry dynamics, saturation of local market, etc. Therefore, a given standard will vary with the kind of business being defined, (e.g. 100 employees, for example, is probably too high a limit for many service type firms, and probably too small for many manufacturing businesses.) Therefore, a standard that has wide acceptability and also reflects a reasonable economic perspective is being used.

One hundred employees or less per establishment is roughly, on a cumulative basis, the mid-point of the labor force. Thus, there are approximately an equal number of employees in establishments

TABLE B.8—An Example of Universe Small Business Definitions for the United States (1978 based)

Classification Variable	Reporting Unit	Comparable With:	Total Number of Small Businesses:	How Defined	Comment:
1. Employment-Wage and Salary	Establishment (Dun & Bradstreet DMI file)	Business Establishments with employees; County Business Patterns (Census); Unemployment Insurance data (BLS)	4,572,000 (1978)	<100 employees per establishment	97.3% of total number of businesses of 4,699,000
2. Employment-Wage & Salary	Enterprise (DMI-FIN/STAT)	Enterprise Statistics (Census); Corporations and other Enterprises	3,664,000 ¹ (1978)	<100 employees per company	98% of total number of 3,737,000; note: IRS corporations (1976) = 2,082,000
3. Employment-Self-employed	Proprietor (IRS-Schedules C and F & Selected 1040s)	Social Security data (CWHS)	6,571,000 ² (1977)	\$5,000 or more of gross receipts	Closest to the "Mom & Pop" concept: total forms filed (1977) = 11,348,000
4. Employment	Partnerships (IRS-Form 1065)		869,000 ³	\$5,000 or more of gross receipts	

Summary: Total number of small businesses:⁴

Establishment based:

2,143,000	(corporate establishments - DMI) ¹
6,571,000	(proprietors - IRS)
869,000	(partnerships - IRS)
774,000	(marginal corporations - IRS) ⁵
10,357,000	Total (including farm proprietors) ⁶

Enterprise based:

1,234,000	(corporation - DMI)
6,571,000	(proprietors - IRS)
869,000	(partnerships - IRS)
774,000	(marginal corporations - IRS)
9,448,000	Total (including farm proprietors) ⁷

TABLE B.8—An Example of Universe Small Business Definitions for the United States (1978 based)

NOTES:

¹About 35% of the business enterprises on the DMI are corporations. Of these, an estimated 74,000 are large corporations (more than 100 employees), and 1,234,000 are small corporations.

²Farm proprietorships = 2,932,000 in 1977 less 47% with \$5,000 or less in receipts

— 1,366,000 = 1,566,000

Nonfarm proprietorships = 8,414,000 in 1977 less 41% with \$5,000 or less in receipts

— 3,409,000 = 5,004,000

Total proprietorships = 11,346,000 in 1977.

— 4,775,000 = 6,570,000

³Partnerships = 1,153,000 in 1977 less 25% with \$5000 or less in receipts

— 284,000 = 869,000

*Increasing the definition of establishments to include all those with less than 500 employees would increase the total of (1) above to 4,680,000 (99.5% of 4.7 million) and the total number of small establishment based businesses to 10,464,000. Increasing it to enterprises of 500 employees or less would increase (2) above to 3,723,000 and total number of small businesses to 9,507,000 on an enterprise basis.

*IRS (1976) reports 2,082,000 corporations, of which 1,274,000 have net income. Of those corporations not reporting net income, approximately 774,000 are assumed to be part-time or marginal businesses.

*Total is 8,791,000 excluding farm proprietors.

*Total is 7,882,000 excluding farm proprietors.

with less than this figure,²² and in establishments with more than this figure. (See Table B.2.) When used for policy purposes, it has been found that the 100 or 500 employee upper limit on size produces little difference.²³ In fact, in a recent study of employment growth between 1972-1977 for two digit industries, virtually all but 6 two digit industries showed the same directions of change whether 100 employees per establishment or 500 employees per establishment was used as a definition of small business.²⁴

Table B.8 shows that there are approximately 9.4 million small businesses on an enterprise basis, and about 10.4 million on an establishment basis applying the \$5,000 criterion from above. What usually confuses the count, however, is that detailed information exists for less than half of the businesses: the Dun and Bradstreet DMI file, for example, contains employment and sales data on about 4.7 million establishments or only 45 percent of the total number of businesses (e.g. 4,700,000/10,357,000 in Table B.5). The confusion in this area stems from the difference between a simple count of the number of firms or establishments, and the much lower number on which detailed economic information is maintained and collected.

If Government surveys more thoroughly integrated data on wage and salary workers and the self-employed, researchers would obviously have access to a richer, more comprehensive set of statistics on small firms. The irony does exist that the zero-employee (e.g. "mom and pop") businesses, which comprise roughly 40 percent of the small business population only comprise about 9 percent of the civilian labor force. The Office of Advocacy is attempting to develop integrated statistics on these workers who make up a dynamic segment of the small business population.

SECTION IV. SUMMARY AND CONCLUSION

As displayed in Table B.9, SBA is making progress in building the kind of data base for small businesses that was outlined by Congress in P.L. 96-302. The most significant accomplishments to date have been the reconciliation of Dun's Establishment and Enterprise

²² On an enterprise basis, 33 percent of employees are in *enterprises* with less than 100 employees. (Unpublished USEEM data, Brookings Institution, 1981).

²³ This is discussed in greater detail in Bruce D. Phillips and Andrea Skowronek "Employment in Small Entities, 1969-1977," *American Journal of Small Business*, forthcoming.

²⁴ Ibid.

Files for 1978, drawing useful samples from the data base on a regional basis and the analysis of establishment characteristics. A more profound accomplishment will be the reconciliation of the DMI files for 1976, 1978, and 1980, which will provide data for analysis of changing business characteristics.

The Dun and Bradstreet Financial Statistics File (FIN/STAT) is a valuable potential tool for the small business community. Within 18 months, SBA will have a model capable of simulating tax policy changes for a working sample of small businesses over the 1976-1981 period. This model will also have tax and depreciation changes built into it, and will be of use to the Treasury Department, to the Congressional Ways and Means and Finance Committees, and to the Budget Office when new tax policies are proposed.

Three steps are now underway to develop the model described above. The first is choosing a representative sample of 250,000-300,000 firms from FIN/STAT to begin the analysis. The second step involves making sure that the financial data required for each cell of the sample matrix is available in sufficient quantity and with valid identities. Some limited imputation of key ratios for intervening years will probably be necessary in selected cases. The third step of the process is to impute tax and depreciation items and test the financial simulation system.

The remainder of this paper was devoted to examining the comparability of other aggregate data sources with the three Dun and Bradstreet based microdata files and alternately defining the small business universe. In the former case, what is known is that employment by size on an establishment basis is the most widely available and comparable datum from conventional government sources (e.g. Census, BLS). Enterprise (company) employment is only available for a subset of industries from *Enterprise Statistics*, and in addition, the establishment-enterprise reporting unit differ-

TABLE B.9—*Information Potentially Available From SBA Interim Micro Data Base*

EMPLOYMENT, LAYOFFS AND NEW HIRES
 NUMBER OF BUSINESS ESTABLISHMENTS AND TYPE, PROPRIETORSHIP, PARTNERSHIP OR CORPORATION
 SALES AND NEW ORDERS
 INVESTMENT IN PLANT AND EQUIPMENT
 CHANGES IN INVENTORY AND INVENTORY TURNOVER
 CAPITAL INVESTMENT INCLUDING DEBT, EQUITY AND RETAINED EARNINGS
 DEBT TO EQUITY RATIOS
 CONCENTRATION RATIOS
 POLICY ANALYSIS

ences are non-comparable with the IRS legal definitions of proprietorships, partnerships, and corporations. While sales and assets data are readily available from the IRS' *Statistics of Income*, the inaccessibility of microdata and lack of comparable employment statistics block any possible comparison between USEEM and the other sources due to the non-identification of IRS reporting units and non-consistent reporting of employment data.

Substantial progress has been made. Further advance. ment is expected during the coming year. Clearly more rapid progress would be possible if SBA could access the files of other Government agencies directly. Data on some variables such as new plants and equipment and new hires, for example, remain elusive without future legislated changes in data accessibility. Within these limits, SBA hopes to better serve the information needs of the Congress, the Administration, and the small business community in the future.

ADDENDUM

Other Data Development Projects—Completed and Underway

Self-Employment: 1960-75 Microdata Samples

SBA has purchased a longitudinal file on sole proprietors. This file is drawn from one made available by the Social Security Administration. Each year a 1 percent Continuous Work History Sample (CWHS), based on the same ending digits of the social security number, is drawn from individuals who file an IRS Form SE. This is a tax form for proprietors and partners who have earnings of more than \$500 and have not paid the maximum social security tax from wage and salary employment.

Included in each annual file is information on the sex, race, age, industry, county, and earnings of all covered proprietors. This longitudinal file is at the Bureau of Economic Analysis, (BEA) Department of Commerce. Approximately 60,000 records are available each year. Because of recent interpretations by IRS of the confidentiality provisions of the 1976 Tax Reform Act, data since 1975 have not been made available to CWHS users, including BEA. When the confidentiality problem is resolved, up-to-date information will be available. This data will allow description and trend analysis for policy purposes of a segment of small business that is not well described in any other Federal statistical program.

Development of a Microdata File for Manufacturing from Census Data

SBA has provided a two year grant to create a 10 year longitudinal file of a sample of manufacturing firms in the U.S. using Census of Manufactures and Survey of Manufactures data. The grantee will build a file containing firm by firm microdata for each of the 10 years.

To date the problems with this statistical data have forced two compromises on this project. First, the 1972 SIC system changes have limited the file development to five years rather than ten. Second, the lack of adequate data has caused the project staff to eliminate manufacturing firms with fewer than 20 employees from the file. This latter decision is a disappointment, but suggests the complexity involved in developing a small business data base, even with full access to Federal microdata.

When complete, the micro file created will not be fully accessible by researchers. The file will be stored on a limited-access computer. Researchers will prepare analytical programs to examine the file, test these on a simulated sample from the file, and, when satisfied, submit these analytical programs to Census. Census will run the programs on the real file, review the results to assure that no breach in confidentiality has occurred, and then give the results to the researcher. This form of limited access to microdata is the best Census can agree to under current confidentiality restrictions and is far greater than what is currently available.

Summary Tabulation of History from the MIT Data Base

MIT's Program on Neighborhood and Regional Change has worked with the DMI files for over six years. SBA has taken advantage of this expertise in several ways. Tabulations of base line data were prepared on the distribution of firms, establishments, sales, employment, and the average age of firms. For the periods 1969-72 and 1974-76, information is available on births and deaths, expansions and contractions, and in-migration and out-migration of firms.

Data by county for major industries is on magnetic tape at SBA. It includes the following items: the number of establishments, average sales, employment, age of business, births, deaths, expansions, contractions, in-migration, and out-migration. This data has been used to show states how their small business community contributes to economic growth. It is hoped that this will encourage states to initiate their own state data base efforts.

Small Business Monitoring System

Under contract to SBA, MIT will be constructing a small business monitoring system, a group of indices by industry and state designed to act as a barometer of job growth and economic change in the small business sector. This work will be coordinated with that of the Brookings Institution as it draws on the 1976-1978-1980 longitudinal DMI files.

In addition, SBA is looking for ways to select samples of microdata without breaking confidentiality rules. The Center for Naval Analysis is examining a sample of IRS records, and within the next six months SBA will be in possession of most of the useful data from the IRS-SBA Interagency match (which is imputing employment into the Corporate *Statistics of Income*).

APPENDIX C

MINORITY-OWNED AND WOMEN-OWNED BUSINESSES

APPENDIX C—MINORITY-OWNED AND WOMEN-OWNED BUSINESS

Over the past several years, Federal, state and local government agencies, the Congress, and the private sector have increasingly expressed interest in minority and women's business enterprise. Available data on minority-owned and women-owned businesses are not as up-to-date, comprehensive, or reliable as needed. These data do, however, provide some basis for appreciating the contribution minorities and women make to small business. Data of this type are required to further evaluate the various public and private programs affecting women and minority small business owners and to begin to measure the overall progress and development of minority and women-owned businesses.

MINORITY-OWNED BUSINESS

The Bureau of the Census Surveys of Minority-Owned Business for 1969, 1972, and 1977 provide basic economic data on businesses owned by Blacks, persons of Spanish or Latin American ancestry, and persons of American Indian, Asian, or other origin or descent. The surveys are enterprise rather than establishment-based, and include the following data categories: number of firms, gross receipts, number of paid employees, and annual payroll. The data are available geographically, by industry, size, and legal organization of the firm.

In 1977 there were over 560,000 minority owned firms with combined total gross receipts of more than \$26 billion, an increase of 31 percent in number of firms and 69 percent in gross receipts since 1972. By comparison, the Gross National Product during this period increased 62 percent.

Minority-owned firms in 1977 accounted for 5.7 percent of the total number of sole proprietorships, partnerships, and small (subchapter S) business corporations in the United States and 3.5 percent of their gross receipts. Table C.1 provides comparisons of all minority-owned firms with all United States firms by industry. Table C.2 compares business ownership by minority groups for 1969, 1972 and 1977.

Industry Characteristics

Minority-owned firms, like the majority of all United States firms, are concentrated in the retail and service industries. These two sectors accounted for 68 percent of the number of firms and 64 percent of the gross receipts of all minority-owned firms in 1977. Finance, insurance, and real estate show the largest increases in gross receipts since 1972.

Table C.3 summarizes the 10 major industry groups with the largest dollar volume of receipts. While food stores accounted for only 4 percent of the total number of minority-owned firms, these stores had the largest gross receipts of any industry group: 12 percent of the total for all industries. Personal services accounted for the largest number of firms, attributing to 10 percent of all minority-owned firms, but only 3 percent of total gross receipts.

TABLE C.1—*Comparison of Firms and Receipts, by Industry,
for Minority-Owned Firms
With All United States Firms: 1977*

Industry Division	Firms ¹ (thousands)			Receipts ¹ (billion dollars)		
	Minority-Owned ²			Minority-Owned ²		
	All ²	Number	Percent	All ²	Number	Percent
All Industries	9,833	560	5.7	633.1	22.2	3.5
Construction	1,107	52	4.7	72.6	2.1	2.9
Manufacturing	287	12	4.2	38.5	.9	2.3
Transportation and public utilities	419	36	8.6	22.8	.9	3.9
Wholesale and retail trades	2,600	156	6.0	291.4	10.8	3.7
Finance, insurance, and real estate	1,404	28	2.0	66.6	.7	1.1
Selected services	3,623	234	6.5	120.1	5.9	4.9
Other industries and industries not classified	393	41	10.4	21.2	.8	3.8

¹ Includes only sole proprietorships, partnerships, and small (subchapter S) business corporations.

² Sole proprietorship and partnership data based on data from United States, Internal Revenue Service, Preliminary Report, Statistics of Income, Business Income Tax Returns, 1977. Small business corporation data based on Internal Revenue Service, Preliminary Report, Statistics of Income, Corporation Income Tax Returns, 1976. Adjusted to exclude industries not covered in this report.

³ For comparability purposes, this table excludes minority-owned firms filing Form 1120 tax returns (corporations other than subchapter S small business corporations).

Source: 1977 Survey of Minority-Owned Business Enterprise, Bureau of the Census, 1980.

TABLE C.2—Comparison of Business Ownership by Minority Group: 1969, 1972 and 1977

Minority	1977		1972		1969		Percent Change 1969 to 1972		Percent Change 1972 to 1977*	
	Firms	Receipts	Firms	Receipts	Firms	Receipts	Firms	Receipts	Firms	Receipts
	(Number)	(Million dollars)	(Number)	(Million dollars)	(Number)	(Million dollars)	(Number)	(Million dollars)	(Number)	(Million dollars)
United States, total	561,395	26,382	381,935	16,556	321,958	10,639	18.6	55.6	30.7	68.5
Black	231,203	8,645	194,986	7,168	163,073	4,474	19.6	60.2	11.5	47.5
Spanish Origin	219,355	10,417	120,108	5,306	100,212	3,360	19.9	57.9	52.6	74.8
Asian Americans, American Indians, and Others	110,837	7,319	66,841	4,082	58,673	2,805	13.9	45.5	46.9	94.7

*Adjusted for new industries within Census scope and European Spanish origin-owned firms.

Source: 1977 Survey of Minority-Owned Business Enterprise. Bureau of the Census, 1980.

TABLE C.3—Ten Largest Major Industry Groups in Receipts of Minority-Owned Business: 1977

SIC Code		Firms (number)	Receipts (million dollars)
54	Food stores	22,488	2,641,321
55	Automotive dealers and service station	10,273	2,258,389
58	Eating and drinking places	29,084	1,911,103
80	Health services	31,978	1,583,500
59	Miscellaneous retail	45,071	1,363,081
17	Special trade contractors	31,696	1,188,482
51	Wholesale trade—nondurable goods	4,467	1,092,618
72	Personal services	55,950	766,166
50	Wholesale—durable goods	2,934	719,200
73	Business services	26,769	624,725

Source: 1977 Survey of Minority-Owned Business Enterprise, Bureau of the Census, 1980.

Geographic Characteristics

Minority-owned businesses are largely concentrated, with a few exceptions, in the most populated areas. Nineteen percent of all minority-owned businesses are located in California, and nearly half of these are in the Los Angeles metropolitan area (See Table

TABLE C.4—Comparison of Minority-Owned Firms in Ten Largest Standard Metropolitan Statistical Areas With Number of Minority-Owned Firms in the State: 1977

SMSA	SMSA		State		Percent SMSA to State	
	Firms (number)	Receipts (\$1,000)	Firms (number)	Receipts (\$1,000)	Firms	Receipts
Los Angeles-Long Beach, California	50,258	2,617,733	107,035	5,967,769	47	44
New York, N.Y.-N.J.	25,855	1,060,315	31,661	1,288,020	82	82
San Francisco-Oakland, California	19,602	1,156,993	107,035	5,967,769	18	19
Chicago, Illinois	16,682	1,254,707	19,413	1,374,591	86	91
Honolulu, Hawaii	16,204	1,537,869	20,625	1,711,694	79	90
Washington, D.C.-Md.-Va.	14,543	458,997	(X)	(X)	(X)	(X)
Houston, Texas	11,833	438,820	50,782	2,199,619	23	20
Miami, Florida	10,710	800,791	22,803	1,283,203	47	62
Philadelphia, Pennsylvania-N.J.	8,553	340,893	10,830	452,037	79	75
Detroit, Michigan	7,680	467,438	10,840	479,361	71	81

¹N.Y. State data only.

²Pa. State data only.

(X) Not applicable.

Source: 1977 Survey of Minority-Owned Business Enterprise, Bureau of the Census, 1980.

C.4). More than 41 percent of all minority-owned firms and 47 percent of their total gross receipts were reported located in five states: California, Texas, New York, Florida, and Hawaii.

Table C.4 shows the 10 standard metropolitan statistical areas (SMSA's) with the largest number of minority-owned firms and compares the firms in these SMSA's with the number in their respective states. These 10 SMSA's accounted for 32 percent of the total number of minority-owned firms in the United States and 38 percent of their gross receipts.

Tables C.5 and C.6 list the 10 largest concentrations of minority-owned firms by county and city and their percentage of receipts within their respective states.

TABLE C.5 - Comparison of Minority-Owned Firms in Ten Largest Counties
With Number of Minority-Owned Firms in the State: 1977

County	County		State		Percent County to State	
	Firms (number)	Receipts (\$1,000)	Firms (number)	Receipts (\$1,000)	Firms	Receipts
Los Angeles, California	50,258	2,617,733	107,035	5,967,769	47	44
Honolulu, Hawaii	16,204	1,537,869	20,625	1,711,964	79	90
Cook, Illinois	15,208	1,183,672	19,413	1,374,591	78	86
Harris, Texas	10,791	398,337	50,782	2,199,619	21	18
Dade, Florida	10,710	800,791	22,803	1,283,203	47	62
District of Columbia	8,039	259,804	(X)	(X)	(X)	(X)
New York, N.Y.	7,623	389,179	31,661	1,288,020	24	30
San Francisco, California	7,526	506,854	107,035	5,967,769	7	8
Alameda, California	6,809	390,620	107,035	5,967,769	6	7
Kings, New York	6,462	166,330	31,661	1,288,020	20	13

(X) Not applicable.

Source: 1977 Survey of Minority-Owned Business Enterprise. Bureau of the Census, 1980.

TABLE C.6 - Comparison of Minority-Owned Firms in Ten Largest Cities
With Number of Minority-Owned Firms in the State: 1977

City	City		State		Percent City to State	
	Firms (number)	Receipts (\$1,000)	Firms (number)	Receipts (\$1,000)	Firms	Receipts
Los Angeles, California	25,209	1,319,603	107,035	5,967,769	24	22
New York, N.Y.	22,793	967,576	31,661	1,288,020	72	75
Chicago, Illinois	12,309	906,256	19,413	1,374,591	63	66
Honolulu, Hawaii	10,910	1,387,844	20,625	1,711,694	53	77
Houston, Texas	9,465	348,510	50,782	2,199,619	19	16
District of Columbia	8,039	259,804	(X)	(X)	(X)	(X)
San Francisco, California	7,526	506,853	107,035	5,967,769	7	8
San Antonio, Texas	5,917	236,218	50,782	2,199,619	12	11
Detroit, Michigan	5,563	282,965	10,840	579,361	51	49
Philadelphia, Pennsylvania	5,441	223,269	10,830	452,037	50	49

(X) Not applicable.

Source: 1977 Survey of Minority-Owned Business Enterprise. Bureau of the Census, 1980.

Size of Firm

While only 19 percent of the minority-owned firms had paid employees, these firms accounted for over 72 percent of the total gross receipts and employed almost 500,000 people. Although 63 percent of the employer firms had less than five employees, these firms accounted for only 28 percent of the total gross receipts of employer firms. Firms with 50 or more employees accounted for only .6 percent of the total number of employer firms but over 20 percent of the total gross receipts for firms with employees.

Almost 43 percent of the minority-owned firms had gross receipts of less than \$10,000. These firms made up 3 percent of the total gross receipts. Firms with gross receipts of over \$500,000 accounted for 34.1 percent of the total gross receipts but comprised less than 1 percent of the total number of firms.

Legal Form of Organization

Sole proprietorships accounted for 93 percent of the total number of minority-owned firms but only 58 percent of the gross receipts. Only 2 percent of the total number of firms were corporations but they accounted for almost 29 percent of the gross receipts. Partnerships accounted for 5 percent of the number of firms and 13 percent of the gross receipts.

Financial Viability of Minority Businesses

A recent collaborative study conducted by the University of Texas, the Minority Business Development Administration (MBDA), and the Dun and Bradstreet Corporation produced information about the profit, risk, and financial characteristics of minority-owned business enterprises.¹ A financial statistics data base which parallels the Small Business Administration Small Business Data Base was created. A sample of 6,000 business firms was selected. Balance sheet and income data for 1978 were made available for each firm by Dun and Bradstreet. The sample was divided into the following three equal groups: 1) minority firms-assisted by MBDA; 2) minority firms *not* assisted by MBDA; and 3) a random sample of control (non-minority) firms.

The study controlled for such factors as size and age of firm, and industry composition in its search for significant and predictable

¹"Key Business Ratios of Minority-Owned Businesses," Center for Studies in Business, University of Texas, San Antonio, William C. Scott, Antonio Furino, and Eugene Rodriguez, Jr., January 1981.

differences in the performance characteristics of enterprises based on racial/ethnic origin of their owners/stockholders. Principle findings showed that:

1. Minority firms which were not assisted by MBDA were found to display virtually the same profit characteristics as non-minority firms. However, minority firms which were being assisted by MBDA were generally those which needed the greatest support. The MBDA-assisted firms reported more debt than other firms. The reason for this finding may be that the least profitable minority firms are those in need of capital, and therefore those most likely to apply for loans.
2. Although minority firms received bank loans with the same frequency as did non-minority firms, the size of loans to minority-owned firms corresponded with their profit performance significantly and more frequently than did size of loans to non-minority firms. The evidence suggests that bankers see minority-owned firms as less profitable. Therefore, minority-owned firms are less frequently loaned money based on their potential earnings than on the degree of collateral or other guarantees they can provide.
3. Minority ownership does not predict performance. For example, if firms were randomly selected from each of the categories noted above (assisted, non-assisted, and control), minority firms would not be represented among firms showing losses more frequently than would non-minority firms. The conclusion is that minority firms are no more risky than control (non-minority) firms.
4. Minority-owned firms are under-capitalized and carry a heavier debt structure than non-minority firms.

WOMEN-OWNED BUSINESSES

The principle sources of data on women-owned business are the Census Bureau's 1972 and 1977 Surveys of Women-Owned Businesses. For the purpose of collecting data for both Surveys, the Bureau of the Census defined a firm as woman-owned if the sole owner or at least half of the partners were women; a corporation was classified as woman-owned if 50 percent or more of the shares were owned by women.¹

¹It should be noted that the definition of a woman-owned firm recommended by Executive Order 12138, entitled Creating a National Women's Business Enterprise Policy and Prescribing Arrangements for Developing, Coordinating, and

TABLE C.7—Comparison of Firms and Receipts, by Industry, for Women-Owned Firms With All United States Firms: 1977

Industry Division	Firms ¹ (thousands)			Receipts ¹ (billion dollars)		
	All ²	Women-Owned ³		All ²	Women-Owned ³	
		Number	Percent		Number	Percent
All Industries	9,833	702	7.1	633.1	41.5	6.6
Construction	1,107	21	1.9	72.6	2.9	4.0
Manufacturing	287	19	6.6	38.5	3.6	9.4
Transportation and public utilities	419	12	2.9	22.8	1.3	5.7
Wholesale and retail trades	2,600	228	8.8	291.4	23.4	8.0
Finance, insurance, and real estate	1,404	66	4.7	66.6	2.1	3.2
Selected services	3,623	316	8.7	120.1	7.1	5.9
Other industries and industries not classified	393	40	10.2	21.2	1.2	5.7

¹ Includes only sole proprietorships, partnerships, and small (subchapter S) business corporations.

² Sole proprietorship and partnership data based on data from United States, Internal Revenue Service, Preliminary Report, Statistics of Income, Business Income Tax Returns, 1977. Small business corporation data based on Internal Revenue Service, Preliminary Report, Statistics of Income, Corporation Income Tax Returns, 1976. Adjusted to exclude industries not covered in this report.

³ For comparability purposes, this table excludes minority-owned firms filing Form 1120 tax returns (corporations other than subchapter S small business corporations).

Source: 1977 Economic Census: Women-Owned Business, Bureau of the Census.

The 1977 data are not directly comparable to data published in the 1972 report because of expanded industrial coverage in 1977 and methodological improvements in processing since 1972. After adjusting for coverage differences and non-comparability, there were 702,000 women-owned businesses in 1977 with combined total receipts of over \$42.5 billion. (See Table C.7.) Between 1972 and 1977 there was an increase of 30.0 percent in the number of women-owned firms and a 72.3 percent increase in their business receipts. The Gross National Product during this period increased 62 percent. A comparison of women-owned businesses in 1972 and 1977 is found in Table C.8.

As is true for all small businesses, women-owned firms are concentrated in the service and retail trade industries. Nearly 75 per-

Implementing a National Program for Women's Business Enterprise, is: A woman-owned business is one which is at least 51 percent owned, controlled, and operated by a woman or women. "Controlled" is defined as exercising the authority to make policy decisions and "operated" is defined as actively involved in the day-to-day management of the business.

TABLE C.8—Comparison of 1972 and 1977 Women-Owned Businesses

Industry	1977 Data		Revised 1972 Estimates		Percent Change Revised 1972 to 1977	
	Firms (number)	Receipts (\$1,000)	Firms (number)	Receipts (\$1,000)	Firms (number)	Receipts (\$1,000)
All Industries	701,957	41,505,724	(X)	(X)	(X)	(X)
1977 Industries Out-of-Scope in 1972	70,129	1,039,328	(X)	(X)	(X)	(X)
Industries in Scope in both 1972 and 1977	*631,828	*40,466,396	486,009	23,485,950	30.0	72.3
Construction	21,129	2,912,246	20,943	2,296,237	9	26.8
Manufacturing	18,914	3,561,748	14,015	2,004,095	35.0	77.7
Transportation & Public Utilities	11,874	1,323,061	9,956	649,141	19.3	103.8
Wholesale and Retail Trades	227,856	23,380,471	182,451	14,451,128	24.9	61.8
Finance, Insurance and Real Estate	66,257	2,071,278	45,031	946,899	47.1	118.7
Selected Services	*245,902	*6,035,936	163,437	2,536,556	50.5	138.0
Other Industries	39,896	1,181,656	50,176	601,894	-20.5	96.3

(X) Not Applicable

*Data adjusted to include only 1972 coverage.

Source: 1977 Economic Census: Women-Owned Business, Bureau of the Census.

cent of the 702,000 women-owned businesses in the U.S. are in these two sectors. The 544,000 women in services and retail trade had gross receipts of \$30.5 billion or 73 percent of the total \$41.5 billion earned by women-owned businesses in 1977. (See Table C.7.) The 10 industry groups accounting for the largest dollar volume of receipts for women-owned firms in 1977 are summarized in Table C.9.

TABLE C.9—Ten Largest Major Industry Groups in Receipts of Women-Owned Firms 1977

SIC Code	Industry Group	Firms (number)	Receipts (million dollars)
51	Wholesale Trade—Nondurable Goods	8,687	3,881
59	Miscellaneous Retail	108,233	3,659
58	Eating and Drinking Places	39,415	3,350
50	Wholesale Trade—Durable Goods	7,446	3,020
54	Food Stores	21,309	2,895
55	Automotive Dealers & Service Stations	8,186	2,627
65 pt.	Real Estate	55,093	1,609
72	Personal Services	95,202	1,555
56	Apparel & Accessory Stores	16,716	1,542
17	Special Trade Contractors	14,409	1,420

Source: 1977 *Economic Census: Women-Owned Business*, Bureau of the Census.

Geographic Characteristics

California had the largest number of women-owned firms in 1977 with 101,288 firms with gross receipts of \$4.1 million. New York was second with 62,747 firms and \$3.9 million in gross receipts. Thirty-nine percent of women-owned businesses representing 36 percent of the total gross receipts were located in five states: California, New York, Texas, Florida and Illinois. The Pacific Region had the largest number of women-owned firms: 130,387 firms with \$5.6 million in gross receipts. Table C.10 shows that 10 SMSA's account for 25 percent of the total number of women-owned firms in the United States and 24 percent of their gross receipts. (See Tables C.11 and C.12 for comparable data on counties and cities.)

Legal Form of Organization

In 1977 the majority of women-owned firms (531,856 or 75.8 percent) operated as sole proprietorships (See Table C.13). This group accounted for 22.9 percent of gross receipts. Of the total number of firms, 111,430 or 15.9 percent were partnerships accounting for 31.2 percent of gross receipts. Corporations accounted for only 8.4 percent of the total number of firms but 46.0 percent of gross receipts.

TABLE C.10—Comparison of Women-Owned Firms in Ten Largest Standard Metropolitan Statistical Areas With Women-Owned Firms in the State: 1977

SMSA	SMSA		State		Percent SMSA to State	
	Firms (number)	Receipts (\$1,000)	Firms (number)	Receipts (\$1,000)	Firms	Receipts
New York, N.Y.—N.J.	36,997	2,705,756	62,747*	3,961,795*	59	68
Los Angeles—Long Beach, Calif.	36,685	1,401,596	101,288	4,131,151	36	34
Chicago, Ill.	21,077	1,624,056	34,323	2,459,884	61	66
San Francisco—Oakland, Calif.	18,048	645,924	101,288	4,131,151	18	16
Philadelphia, Pa.—N.J.	11,697	746,953	31,288**	1,886,225**	37	40
Washington, D.C.—Md.—Va.	11,413	577,230	(X)	(X)	(X)	(X)
Dallas—Fort Worth Texas	10,294	560,760	43,693	2,373,950	24	24
Detroit, Mich.	9,953	752,287	21,727	1,457,209	46	52
Boston, Mass.	9,553	364,107	16,896	658,202	57	55
Houston, Tex., SMSA	8,588	413,508	43,693	2,373,950	20	17

(X) Not Applicable

* N.Y. Data Only

**Pa. Data Only

Source: 1977 Economic Census: Women-Owned Business. Bureau of the Census.

TABLE C.11—Comparison of Women-Owned Firms in Ten Largest Cities With Women-Owned Firms in the State: 1977

City	County		County		Percent City to State	
	Firms (number)	Receipts (\$1,000)	Firms (number)	Receipts (\$1,000)	Firms	Receipts
New York, N.Y.	31,817	2,206,306	62,747	3,961,795	51	56
Los Angeles, Calif.	17,204	667,900	101,288	4,131,151	17	16
Chicago, Ill.	8,935	796,451	34,323	2,459,884	26	32
San Francisco, Calif.	5,784	249,051	101,288	4,131,151	6	6
Houston, Tex.	5,617	305,038	43,693	2,373,950	13	13
Philadelphia, Pa.	4,385	282,481	31,288	1,886,225	14	15
Dallas, Tex.	4,031	254,683	43,693	2,373,950	9	11
San Diego, Calif.	3,983	171,870	101,288	4,131,151	4	4
Washington, D.C.	3,807	177,075	(X)	(X)	(X)	(X)
Denver, Colo.	2,977	170,942	12,533	674,722	24	25

(X) Not Applicable

Source: 1977 Economic Census: Women-Owned Business, Bureau of the Census.

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TABLE C.12—Comparison of Women-Owned Firms in Ten Largest Counties With Women-Owned Firms in the State: 1977

County	County		County		Percent County to State	
	Firms (number)	Receipts (\$1,000)	Firms (number)	Receipts (\$1,000)	Firms	Receipts
Los Angeles, Calif.	36,685	1,401,596	101,288	4,131,151	36	34
New York, N.Y.	17,457	1,337,113	62,747	3,961,795	31	34
Cook, Ill.	16,352	1,296,919	34,323	2,459,884	48	53
Orange, Calif.	8,552	289,898	101,288	4,131,151	8	7
Harris, Tex.	7,679	373,158	43,693	2,373,950	18	16
San Diego, Calif.	7,408	296,629	101,288	4,131,151	7	7
Dade, Fla.	7,164	524,902	34,439	2,015,474	21	26
Dallas, Tex.	6,326	327,045	43,693	2,373,950	14	14
San Francisco, Calif.	5,784	249,051	101,288	4,131,151	6	6
Kings, N.Y.	5,331	365,489	62,747	3,961,795	9	9

Source: 1977 Economic Census. Women-Owned Business. Bureau of the Census.

TABLE C.13—Comparison of Number of Firms and Receipts for Firms Owned by Women to All United States Firms: 1977 *

Industry Division	Firms (thousands) Women-Owned			Receipts (billion dollars) Women-Owned		
	All	Number	Percent	All	Number	Percent
All Industries	**9,833	702	7.1	**633.1	41.5	6.6
Sole Proprietors	**8,414	532	6.3	**324.5	9.5	2.9
Partnerships	**1,035	111	10.7	**163.9	12.9	7.9
Small Corps.	385	59	15.3	**144.8	19.1	13.2
Construction	1,107	21	1.9	72.6	2.9	4.0
Sole Proprietors	994	10	1.0	42.8	.3	.7
Partnerships	69	5	7.2	14.2	.8	5.6
Small Corps.	43	6	14.0	15.6	1.8	11.5
Manufacturing	287	19	6.6	38.5	3.6	9.4
Sole Proprietors	224	9	4.0	10.0	.2	2.0
Partnerships	28	5	17.9	8.8	.9	10.2
Corporations	35	5	14.3	19.7	2.4	12.2
Transportation & Public Utilities	419	12	2.9	22.8	1.3	5.7
Sole Proprietors	385	7	1.8	13.9	.2	1.4
Partnerships	17	2	11.8	3.8	.3	7.9
Corporations	17	3	17.6	5.1	.8	15.7
Wholesale & Retail Trades	2,600	228	8.8	291.4	23.4	8.0
Sole Proprietors	2,265	150	6.6	160.5	5.0	3.1
Partnerships	193	52	26.9	48.6	7.3	15.0
Corporations	142	25	17.6	82.3	11.1	13.5
Finance, Insurance & Real Estate	**1,404	66	4.7	**66.6	2.1	3.2
Sole Proprietors	895	50	5.6	19.3	.6	3.1
Partnerships	463	12	2.6	**42.9	.9	2.1
Corporations	46	4	8.7	4.3	.5	11.6
Selected Services	3,623	316	8.7	120.1	7.1	5.9
Sole Proprietors	3,303	273	8.3	67.8	2.7	4.0
Partnerships	227	30	13.2	37.8	2.2	5.8
Corporations	94	13	13.8	14.5	2.2	15.2
Other Industries & Industries Not Classified	393	40	10.2	21.2	1.2	5.7
Sole Proprietors	348	32	9.2	10.2	.4	3.9
Partnerships	37	5	13.5	7.7	.5	6.5
Corporations	***8	3	37.5	***3.3	.3	9.1

(Excludes corporations other than subchapter S (small) corporations. Detail may not add to totals due to rounding.)

Source: 1977 Economic Census: Women-Owned Business, Bureau of the Census.

* Sole proprietorship and partnership data based on data from United States Internal Revenue Service, Preliminary Report, Statistics of Income, Business Income Tax Returns, 1977. Small corporation data based on Internal Revenue Service, Preliminary Report, Statistics of Income, Corporation Income Tax Returns, 1976.

** Adjusted to exclude industries out of scope of this report.

*** Estimate should be used with caution because of the small number of sample returns on which it is based.

Size of Firm

Women-owned firms with paid employees accounted for 23.9 percent of the total number of firms and 85 percent of gross receipts. There were 437 firms with 100 employees or more (.3 percent of the total number of employer firms). They accounted for \$2.2 billion in gross receipts, or 6.3 percent of the total receipts of firms with employees.

At the high end of the scale, women-owned firms with gross receipts of \$1 million or more accounted for 33.1 percent of the total gross receipts but only .8 percent of the total number of firms. Conversely, 42 percent of the firms had gross receipts of less than \$5,000.

Comparability of Women-Owned Firms to All United States Firms

Women-owned businesses accounted for 7.1 percent of the United States total firms (See Table C.13) and 6.6 percent of the total receipts. The average receipts for women-owned businesses was \$57,000: \$324,000 for corporations, \$116,000 for partnerships, and \$18,000 for sole proprietorships. These are somewhat below the average receipts per firm for the entire economy which was \$64,000: \$376,000 for small corporations, \$158,000 for partnerships, and \$39,000 for sole proprietorships.

Characteristics of Women in Business

The 1977 Survey of Women-Owned Businesses conducted by the Bureau of the Census was the first systematic effort to collect information on the detailed characteristics of women-owned businesses. The survey found that most women-owned businesses were small, first-time endeavors in the service or retail trade industries. The median net income for women-owned businesses was \$6,481, and over 70 percent had no full or part-time paid employees. More than 60 percent of the women-owned businesses were financed from the owner's savings; over 80 percent were started with no capital or less than \$10,000. Owners of partnerships and corporations were more likely to go to banks, government, or friends for financing and to invest larger sums in their businesses than were sole proprietorships. Forty-seven percent of the businesses were located at the owner's residence.

Firms with no employees and small receipts had been in business less time than firms with employees and larger receipts. Partnerships and corporations were more likely to have employees than

were sole proprietorships and had a higher median net income: \$11,073 for partnerships, \$17,074 for corporations, and \$3,903 for sole proprietorships.

There was some correlation between receipts of women-owned businesses and the amount of time the owner spent managing the business, but it was not evident which was cause and which was effect. Women who owned very small firms (receipts of less than \$5,000) and large firms (receipts of \$1,000,000 or more) spent a median of 15.4 and 22.4 hours per week, respectively, managing their businesses; but owners of firms with receipts of \$50,000 to \$99,999 spent a median of 42.0 hours.

The median age of the owners was 52 years. Seventy-three percent of the owners were not married (divorced, separated, widowed, or never married). Married women owned a greater percentage of the larger firms than did unmarried women. Conversely, unmarried women owned a greater percentage of the smaller firms. Married women also owned a larger proportion of firms in the more profitable industries such as wholesale, manufacturing, construction, and transportation and were involved in more partnerships and corporations than were all unmarried owners. Over 90 percent of the owners were white and non-Hispanic.

Almost 75 percent of the women owners had some schooling beyond high school. The majority of those who entered institutions of higher learning had completed that training. Additionally, while this was the first involvement in business ownership for 86 percent of the owners, they had a median of 14.9 years experience as paid employees and 7.4 years of managerial experience. Seventy percent of the owners were the original founders of their businesses.

APPENDIX D

SMALL BUSINESS PROVISIONS OF THE SECURITIES LAWS

APPENDIX D—SMALL BUSINESS PROVISIONS OF THE SECURITIES LAWS

The Securities Act of 1933 requires that sales of securities to the public be registered and full disclosure be made to potential investors so that a reasoned judgment can be made on the investment merits of a particular offering.

Meeting these requirements has made it difficult and costly for small firms to raise capital. The costs and contingent liabilities which accompany a full registration under the 1933 Act have, in effect, inhibited the flow of equity capital to small growth firms.

There are three basic exemptions under the 1933 Act and its implementing regulations which are designed to provide relief to small "issuers:"¹ Sections 3 and 4 of the Act, Regulation A, and Rules 240 and 242.

Sections 3 and 4

Sections 3 and 4 of the Act provide a statutory basis for (1) exempted securities and (2) securities issued as "private offerings."

In 1961, the SEC issued an interpretive ruling in the exemption from registration provisions of Section 3(a)(11) of the Act. The accompanying release indicated that the legislative history of the Act showed that the exemption was designed to apply only to local financing that may practicably be consummated in its entirety only within the state or territory in which the issuer was doing business. By amendments to the Act in 1934, this exemption was removed from Section 5(c) and inserted in Section 3 to relieve dealers of an unintended restriction on trading activity. From a practical standpoint, Section 3(a)(11) exempted only issues which in reality represented local financing by local industries that were carried out through local investment. Transactions reaching beyond this local distribution may require registration.

¹The securities laws have not defined small business, but have equated small business with small issuer. Often this is not the case.

In 1962 the Securities and Exchange Commission provided interpretations on "Non-Public Offerings Exemptions." This provided initial guidelines on issues to be treated as private offerings, i.e., exempt from registration. Section 4(2) provides an exemption from registration for "transactions by an issuer not involving any public offering." There has been much uncertainty, however, as to the precise limits of this "private offering exemption." Generally, sales to persons directly managing the business would fall within the intended scope of the exemption. However, as the number of purchasers increase and their relationship to the company and its management becomes more remote, it becomes more difficult for an issuer to demonstrate qualification for the exemption.

Due to abuses of this exemption, the SEC has made several efforts to clarify its use as an exemption while keeping the "protection of investors and full disclosure" requirements for potential investors. Rule 146 was promulgated as a "safe harbor rule" in an effort to clarify this statutory exemption.

In practice, this rule became so complex that many preferred to rely on court cases involving the Section 4 statutory language. Major specific small offerings or small issuer exemptions provided in Section 4 are Regulation A, Rule 240, and Rule 242.

Regulation A

The Regulation A exemption was a 1933 Act regulation that was first approved in 1936. Section 3(a) of the Act exempts aggregate offerings under \$30,000 and was created for small issues. An additional exemption was provided for securities sold solely for cash and where the aggregate offering price did not exceed \$100,000. In 1956 a general exemption of \$50,000 was adopted while a \$300,000 limitations was created for small issue filings that needed only an offering circular to be filed.

Regulation A is a conditional exemption from registration for certain public offerings not exceeding \$2 million in any 12-month period. Although Regulation A is technically an exemption from the registration requirements, it is often referred to as a "short form" of registration, since an offering circular, which is similar in content to a prospectus, must be filed with the SEC and must be supplied to each purchaser. The securities thus issued are freely tradeable in an aftermarket.

The principal advantages of Regulation A offerings, as opposed to full registration, are:

1. the required financial statements are simpler and need not be audited, and
2. There are no periodic SEC reporting requirements, other than sales reports following the sale of the securities, unless the issuer has more than \$1 million in assets and more than 500 shareholders.

Historically, many of the problems of Regulation A can be classified in two ways. First, the SEC has the authority to require such information as it deems necessary to protect investors so that a Regulation A offering may wind up as time consuming and as costly as a full registration statement. During the early 1960's, Regulation A offerings fell into disfavor with major underwriters because of its abuse by speculators and the greater cost and liabilities of the "due diligence disclosure standard." By raising the Regulation A ceiling to at least \$5 million, more interest may be shown by underwriters.

Rule 240 and Rule 242

Another small offering exemption, Rule 240, was promulgated in 1975. Rule 240 can help a closely-held corporation meet short-term financing needs with an offering of \$100,000 or less.

A more recent attempt to provide small firms with more flexibility in raising capital from sophisticated investors can be found under Rule 242. Rule 242 was adopted by the SEC in January 1980 in order to provide small businesses with more specific classifications of exemptions from registration. The rule provides a limited offering exemption for certain domestic or Canadian corporate issuers for sales of securities totaling up to \$2 million in any six-month period. This concept was expanded by the Small Business Investment Incentive Act of 1980 which created a new statutory exemption from registration under the Securities Act. This involved offers and sales of securities by an issuer solely to one or more "accredited investors."

One clear problem with the exemption discussed under the 1933 Act is that each exemption is independent and may overlap transactions or be contrary in terms of information reports required to be submitted.²

²Proposed Regulation D, promulgated by the SEC in 1981, will, if adopted, create a more uniform and consistent regulatory scheme and should lower small business compliance costs with respect to securities offerings.

APPENDIX E

ANALYSIS OF THE ECONOMIC RECOVERY TAX ACT OF 1981

APPENDIX E—ANALYSIS OF THE 1981 ECONOMIC RECOVERY TAX ACT

1. *Individual Income Tax Reductions*

1. Income is currently subject to tax at progressive rates ranging from 14 percent to 70 percent. Over a thirty-three month period the tax rate on income in each tax bracket will be cut to a range of from 11 percent to 50 percent. The top rate will be reduced from the current 70 percent to 50 percent, effective for tax year 1982, while the other bracket reductions will be phased-in on the following cumulative schedule.

Calendar Year	Amount (Cumulative)
1981	1.25%
1982	10%
1983	19%
1984 and later years	23%

The individual and corporate income tax reduction will reduce expected individual income tax collections of the Treasury Department by over \$600 billion in the years 1981–86. The bulk of this amount will go to individuals. As a result, small businesses that operate as sole proprietorships, partnerships or Subchapter S corporations will also benefit since the income of these entities is taxed directly to the owners at individual income tax rates. (In 1977, almost 13 million of the approximately 14.6 million entities classified as small business, based on asset size by Treasury Department statistics, fell into these categories.) One effect of this rate cut will be to increase the potential amount of retained capital of these businesses, although its impact on a case-by-case basis will be small. Additionally, dividends paid by regular corporations will be taxed to recipient individuals at the lower rates which should also assist in stimulating equity investment.

2. One incidental effect of the rate cut will be a reduction in the theoretical maximum tax that could be owed on capital gains income. Currently, the top rate is 28 percent plus any alternative minimum tax (AMT) that may be due. As a consequence of reducing the maximum regular income tax rate from 70 to 50 per-

cent, the maximum regular tax rate on long-term capital gains (capital assets held more than 12 months) will be effectively reduced from 28 percent (70 percent top rate on the 40 percent of capital gain includable in income) to 20 percent (50 percent top rate on the 40 percent of capital gain includable in income). The Act also reduces the top AMT rate from 25 percent to 20 percent in order to conform it to the reduction of the maximum capital gains tax. In light of the way it is calculated, few taxpayers are subject to AMT liability.

While the new maximum tax on capital gains will now be reduced to 20 percent plus any AMT, in actuality the effective tax rate on capital gains will be reduced to about 8 percent from the current 10 percent. This figure is based on actual or effective, not maximum, tax liability on capital gains income as computed by the Treasury Department using actual tax returns with capital gains income.

The reduction in the tax on capital gains is expected to again, as in 1978, provide an incentive for investors to sell (or unlock) current capital investments and invest anew. Whether this unlocking will be a one-time effect or a stimulus that will herald a long-term increase in investment levels is uncertain. This would potentially provide new capital sources for small businesses. However, conversely, it may also provide new incentives for small business owners to sell their businesses and receive their gains at the lower tax rates. Furthermore, of the capital gains that will be realized, over 70 percent will probably be in nonequity activities, primarily real estate, if past and current investment trends are a guide.

Based on past experience, small business, as a whole, has not been able to attract a great deal of new capital that has become available. However, high technology companies, venture capital entities, etc., should be well placed to receive that portion of additional capital made available by the tax cuts which ultimately does flow to new investments, and the small business community will clearly benefit to that extent.

3. Under the Act, portions of the Internal Revenue Code (IRC) will be indexed or adjusted to compensate for the effect of inflation, starting in 1985. Each tax bracket, the zero bracket amount (ZBA), and the personal exemption will each be indexed yearly to reflect increases in the consumer price index (CPI). This will eliminate bracket creep, the increase in tax liability above real earnings due to the effects of inflation in conjunction with our progressive tax rates.

B. Business Incentive Provisions

A. The Accelerated Cost Recovery System (ACRS)—Depreciation Changes

Historically the expensing of an asset (depreciation) has been based on its useful life. Depreciation is computed by assigning an asset a useful life and a depreciation rate by which to expense depreciation allowances to the level of an asset's salvage value.¹ The asset depreciation range (ADR) system, which was adopted by the Revenue Act of 1971, was a codification of this concept which allows the expensing of assets along audit-proof lives as determined by the Treasury Department.

1. Personal Property

Under the Act, eligible personal property (and certain real property) will be expensed over a three year, five year, 10 year, or 15 year recovery period, depending upon the type of property. Also, if the new system is used, there is no need to determine a salvage value, thus eliminating another source of potential conflict with the IRS. Alternatively, a taxpayer can continue to use the prior ADR system for depreciation purposes. The classification of property by recovery period prescribed by the Act is as follows:

- 3 years Autos, light-duty trucks, R&D equipment and personal property with an ADR midpoint life of four years or less.
- 5 years Most other equipment except long-lived public utility property.
- 10 years Public utility property with an ADR midpoint life greater than 18.5 but not greater than 25 years; and real property with an ADR midpoint life of 12.5 years or less.

¹ The two most common depreciation rates are straight-line and double declining balance. Using the straight-line method, an asset with a ten year useful life would be depreciated one-tenth of its value each year, after adjusting for salvage value. When the double declining balance method is used, an asset with a 10 year useful life is depreciated 20 percent of its value in the first year and 20 percent of its remaining value each year thereafter. The sum of the years digit way is a third common method, though less used than the two above methods. If an accelerated method of depreciation is used, salvage value for an asset does not have to be computed.

15 years Public utility property with an ADR mid-point life exceeding 25 years.

Under a flexibility provision of the Act, taxpayers may elect to use the following longer recovery periods rather than the prescribed class as set forth below:

Property Class:	Optional Periods
3-year property	5, 12 years or ADR Life
5-year property	12, 25 years or " "
10-year property	25, 35 years or " "
15-year property	35, 45 years or " "

Pursuant to the Act, taxpayers have the option of using the straight-line method, the ACRS regular or optional longer recovery period, or the prescribed accelerated method. The prescribed accelerated method, as follows, maximizes the benefit of the cost recovery deduction in the early years of an asset's utilization and automatically switches over to the straight-line or sum-of-the-years digits method at the point necessary to continue the maximization of depreciation deductions:

Prescribed Method

Year property placed in service:

1981-1984	150 percent declining balance, changing to straight-line.
1985	175 percent declining balance, changing to sum of the years- digits method.
After 1985	200 percent declining balance, changing the sum of the years- digits method.

A comparative example of the old and new system as it relates to personal property is shown in the following table. This table illustrates how a machine costing \$200,000, with a useful life of 10 years and a salvage value of \$20,000 would be treated under prior law (1980) and in 1982 if the machine were placed in service July 1, 1982.

2. Real Property

Under the Act, real property is assigned a 15 year recovery period, but taxpayers may elect a 35 year or 45 year extended recovery

Year	NEW LAW		PRIOR LAW	
	Accelerated	Straight-Line	Accelerated (200% Dec. Balance)	Straight-Line
1982	\$ 30,000	\$ 22,224	\$ 20,000	\$ 9,000
1983	44,000	44,444	36,000	18,000
1984	42,000	44,444	28,800	18,000
1985	42,000	44,444	23,040	18,000
1986	42,000	44,444	18,432	18,000
1987	0	0	14,746	18,000
Total	\$200,000	\$200,000	\$141,018*	\$99,000*

* Additional depreciation allowances would be available in 1988-91.

period. Generally, the 175 percent declining balance method will apply in the early years with a switch to the straight-line method in later years to maximize benefits. Under the Act, there is, as in the case of personal property, no longer any need to determine salvage value. Taxpayers may also elect to use the straight-line method.

A comparative example of the old law and the new as it relates to real property is shown in the following table. This illustration compares the deductible amounts over 15 years for a new office building with a cost of \$2,000,000 placed in service on January 1, 1982. It is assumed that, under prior law, the building has a 40-year useful life and a salvage value of \$400,000.

Year	NEW LAW		PRIOR LAW	
	Accelerated *	Straight-line	Accelerated **	Straight-Line
1982	\$ 233,334	\$ 133,334	\$ 75,000	\$ 40,000
1983	206,112	133,334	72,180	40,000
1984	182,064	133,334	69,480	40,000
1985	160,824	133,334	66,880	40,000
1986	142,062	133,334	64,380	40,000
1987	125,488	133,334	61,960	40,000
1988	110,846	133,334	59,640	40,000
1989	104,908	133,334	57,400	40,000
1990	104,908	133,334	55,240	40,000
1991	104,908	133,334	53,160	40,000
1992	104,908	133,334	51,160	40,000
1993	104,908	133,334	49,240	40,000
1994	104,908	133,334	47,400	40,000
1995	104,908	133,334	45,620	40,000
1996	104,908	133,324	45,040	40,000
Total	\$1,999,994	\$2,000,000	\$873,780	\$600,000

* Using 175 percent declining-balance method in 1982 with optimal switchover to straight-line in 1989.

** Based upon 150 percent declining-balance method with switchover to straight-line in 1996.

As the table illustrates, depreciable real estate will get substantially better treatment under the Act than with prior law. Personal depreciable property, while also getting significantly better write-offs, will not fare nearly as well in terms of added benefits as real estate under the changes of the Act.

The Act also conforms the depreciation recapture provisions for both personal and real property to the changes made to the depreciation system. These provisions are designed to prevent the offsetting of ordinary income with depreciation allowances and then selling the assets and taking the profit at capital gains rates.

3. Immediate Expensing

Under the Act a taxpayer will be able to elect to immediately expense up to \$5,000 of personal property depreciation allowances in 1982 and 1983, \$7,500 in 1984 and 1985 and up to \$10,000 in 1986 and thereafter. This would be without regard to the life of the asset. However, if immediate expensing is elected, the investment credit on the immediately expensed portion cannot be taken. Thus, if a profitable small business with an effective tax rate of 30 percent buys a \$3,000 asset in 1982 that falls within the three year recovery period, it can write off the \$3,000 immediately and avoid paying \$900 in taxes in one year, thus having to forego \$300 of investment tax credit. Alternatively, it can depreciate the asset over three years using the prescribed 150 percent declining balance method with the appropriate half-life rule as incorporated by the new Act, and offset \$1,200 in tax liability over the three year period (\$525 in year one of which \$300 is due to the investment tax credit, \$342 in year two and \$333 in year three).

This provision will give small businesses, especially those which make limited amounts of investment in equipment, a special incentive to make investments in depreciable property to obtain the tax benefits of immediate expensing, and avoid depreciation computations altogether.

These changes in the depreciation system will greatly increase the current depreciation allowances available to a business, and thus the amount of current income that can be offset. However, it must be remembered that increased deductions are beneficial only if the entity has income to offset. Also, businesses can obtain the accelerated deductions only if they are financially able to purchase depreciable equipment in the first instance. On this basis, small business will clearly and directly benefit from the more rapid capital recovery permitted by the Act.

The accelerated deductions allowed by the new system will also help small businesses cope with the realities of inflation. The basic problem with the pre-existing system is that the prescribed depreciation deduction schedules, based on concepts of useful life, do not permit capital cost recovery periods to adequately reflect the effect of inflation on replacement costs. Depreciation deductions taken over the useful life of an asset turn out to be less than actual replacement costs.

At the same time, it must be recognized that, as a general rule, small businesses tend to be more labor than capital intensive and have shorter life assets than larger businesses. Based on sketchy and incomplete data, it is estimated that small businesses own about 30 percent of the depreciable asset pool. If one accepts this estimate for discussion purposes, larger businesses must get at least twice as much benefit from any general depreciation change as small businesses, assuming no cap on depreciation deductions. A recent Treasury Department revenue estimate indicates that about 20 percent of the revenue savings of ACRS will go to small businesses in fiscal years 1981-1986.

The key benefit to small business from the depreciation changes will be the vastly simplified recordkeeping burdens for depreciation expenses. Depreciation procedures under the pre-existing system were of such complexity that many small businesses were barred from fully utilizing the system. Thus, the Act will provide more equal treatment of different sized firms in a given industry by removing the practical inequities that exist under the current system. The system will also provide audit certainty by specifying cost recovery periods for all taxpayers, thereby eliminating a major source of tax controversies. The same certainty and standardization of rules will reduce the advantages of tax planning opportunities that on a practical basis are not available to many small businesses. On the negative side, it must be stated that depreciation changes continue and expand the bias of our tax system toward capital intensive businesses and away from labor intensive ones.

B. Investment Tax Credit Changes

Under current law most capital investments in personal property are entitled to an investment tax credit (ITC) equal to 10 percent of the basis of the asset. If the life of the asset is under seven years only a portion of the investment credit is given. Under the Act, the depreciation life of almost all assets has been shortened. Thus, to maintain the current benefits of the ITC, the eligibility life has also been shortened. The investment tax credit changes are as follows:

1. *Amount of Credit*

Under the Act, the credit is:

LIFE OF ASSET (YEARS)	CURRENT AMOUNT OF ITC GIVEN	1982 & THEREAFTER
0—under 3 years	0%	0%
3—under 5 years	3.33%	6%
5—under 7 years	6.67%	10%
7 or more years	10%	10%

Small business will obviously get greater investment credits due to the shortened life needed for full credits and thus possibly improve capital retention opportunities. However, it must be recognized, as in the case of the depreciation benefits, that small business must be able to purchase the new equipment and have offsetting tax liability in order to obtain the benefits of the investment tax credit.

2. *Recapture of the Credit*

The recapture provisions of the investment credit have been changed to conform them to the new depreciation system.

3. *Carryover of the Credit*

Under prior law, unused investment credits could be carried back three years and forward seven years. Pursuant to the Act, the carryover period is extended to 15 years. This change will clearly benefit small businesses. Tax credits are valuable only if there is a tax liability to offset, i.e., there is taxable income. Small businesses, especially those in the start-up, early growth, or loss phases, often cannot use the credits generated in their early years and lose the benefits. The expansion of the carryover period to 15 years will give small business greater opportunity to use the credits generated by their capital investments.

4. *Investment Credit At-Risk Limitation*

Under prior law, there was no at-risk limitation on the allowance of investment tax credits. Under the Act, the allowance of investment tax credits is subject to such a limitation. Basically, the at-risk rules limit investment tax credits to the extent that amounts are at-risk. This provision may postpone or eliminate the allowance of that portion of the credit attributable to nonrecourse financing. However, borrowings from (or guaranteed by) Federal, state or lo-

cal governments and amounts borrowed from banks, insurance companies, credit unions, pension trusts and most other persons in the business of lending money avoid the application of the new at-risk rules. This "safe harbor" is only applicable where there is an at-risk amount equal to at least 20 percent of the asset basis. Special at-risk rules apply to certain energy property. Real estate activities are not subject to the at-risk rules.

This rule could have a substantial adverse impact on small business. While the new at-risk rules were aimed at tax shelters, all sole proprietorships, operating partnerships, and Subchapter S corporations can be directly affected. The February 18, 1981, effective date may cause a *loss* of credits on 1981 returns for equipment purchased since the beginning of the year.

5. Used Property Limitation

Under the Act, the amount of used property eligible for the investment tax credit is to be raised from \$100,000 to \$150,000 in two stages, to \$125,000 for 1981-84 and to \$150,000 for 1985 and thereafter.

Small businesses, unlike large ones, cannot always afford to purchase new equipment and rely heavily on significant amounts of used equipment. Consequently, this provision will assist small businesses in upgrading their production facilities, thereby enhancing their growth.

At the same time, it must be recognized that any limitation on the amount of used equipment qualifying for the credit discriminates against small businesses because of their greater reliance on such used equipment. The discrimination exists because of the relatively low dollar amount allowed, especially in the current period of high inflation. This can force small businesses to buy new equipment at costs which may impair their financial position, or require them to abandon the purchase and thus the benefits of the investment tax credit. The Act will assist in reducing this discrimination.

C. Extension of Net Operating Loss Carryover Period

Under the pre-existing law, net operating losses of most businesses could be carried back three years and forward seven years. Under the Act the carryforward period for most businesses is extended to 15 years. This provision will provide benefits for small business by extending the period in which it can utilize loss carryovers to offset income generated in later years.

This is important because loss carryovers are useful only if there is income to offset. Small businesses, especially those in the start-up or early growth periods, often cannot fully utilize net operating losses. As a consequence, they lose the benefit of these losses through the expiration of the carryover period. The Act will alleviate this problem.

D. Research and Experimentation

The Act provides a 25 percent tax credit for sums expended as either in-house or contract research expenses that are in excess of the amount of such expenditures in the base period, usually the preceding three years. The credit applies to research conducted between July 1, 1981, and the end of 1985. To qualify the research must be in an area in which the taxpayer is carrying on a trade or business. Thus, the credit would not apply to pre-business start-up research costs, and may create pass-through problems for noncorporate or Subchapter S corporate investors. The incremental feature of the credit will prevent small business which spend a constant yearly sum for research from benefiting. However, a company with no prior research and experimentation expenditures, for example, a new company could reap substantial benefits from this provision. Social science and humanities research is expressly excluded from the credit.

While this provision will provide significant benefits to the large companies that are involved in ongoing research, it will also be very helpful to new high technology small businesses. However, as the credit is not refundable, it will not provide immediate benefits unless there is prior (3 years), current or future (15 years) tax liability to offset.

E. Small Business Provisions

The Act includes seven provisions that are specifically designated as small business provisions. The changes relate to four areas: corporate tax rates; accumulated earnings surtax; Subchapter S corporations; and inventory accounting. From a revenue standpoint the total cost of these is no more than \$230 million in the peak year.

1. Corporate Tax Rate Reductions

The corporate income tax is currently progressive for the first \$100,000 of income and a flat rate thereafter. This provision reduces the tax rates on the two lowest brackets or the first \$50,000 of taxable income as follows:

<i>Taxable Income</i>	<i>Present Rate</i>	<i>1982</i>	<i>1983 and Later</i>
\$0-\$25,000	17%	16%	15%
\$25-\$50,000	20%	19%	18%

However, the actual dollar value of this change for a corporation with \$100,000 of taxable income is limited:

Tax on \$100,000			
of Income	\$26,750	\$26,250	\$25,750
Change	—	—500	—1,000

While this provision will have a direct and immediate beneficial impact on small businesses, the impact will be relatively minor. Further work may be necessary for the implementation of the top recommendation of the White House Conference on Small Business to substantially increase the amount of income subject to graduation of the corporate income tax and reduce taxes in all brackets. Nevertheless, the Act has made a start which is clearly in balance with revenue and fiscal needs.

2. *Accumulated Earnings Credit*

The accumulated earnings surtax is a tax penalty to prevent closely-held corporations from avoiding the double taxation of earnings* by not paying out dividends to shareholders. In computing the tax base, a credit is allowed for earnings retained for the reasonable needs of the business. Nevertheless, to many small business persons the surtax is a deterrent to the accumulation of capital for expansion and other operating needs.

As a result, this provision has generated numerous IRS challenges, particularly against businesses whose future capital needs are unclear or unknown and which do not pay out dividends, i.e., small businesses. It has thereby produced costly and time consuming taxpayer involvement in the IRS appeals procedure, as well as substantial litigation.

* Corporate income is taxed at two levels: once at the corporate level in the form of the corporate income tax and a second time when dividends are taxed at the shareholder level.

The Act justifiably increases the safe-harbor credit from \$150,000 to \$250,000. Since 1975, when the accumulated earnings credit was raised from \$100,000 to \$150,000, inflation has generated substantial increases in costs which require additional capital for investments of the same general type. At the same time, substantially increased borrowing costs have required small businesses to rely more heavily on the internal generation of capital for future expansion and other needs. Generally, small businesses do not

have the necessary specific plans for expansion which the law requires to justify accumulations of corporate earnings in excess of the minimum credit. Thus, an increase in the credit adjusts for inflation and increased borrowings costs and provides a greater margin for the retention of earnings for future needs without the threat of IRS challenge.

3. Subchapter S Corporations

Subchapter S corporations are entities that are treated as corporations for legal purposes and partnerships for tax purposes, thus avoiding double taxation of income. Currently Subchapter S corporations can have up to 15 individual shareholders. The Act will now allow up to 25 shareholders and certain testamentary trusts to be considered as shareholders.

4. Inventory Accounting

The Act provides for the simplification of last-in-first-out (LIFO) inventory accounting for small businesses. Businesses with average gross receipts of less than \$2 million for the prior three years are allowed to use a single dollar-value LIFO pool, and taxpayers switching to LIFO are given three years to take into income the inventory write-downs from prior years. Also, the Treasury Department is directed to issue regulations that would simplify the use of dollar-value LIFO inventory accounting through the use of published government indexes.

The expanded availability of LIFO inventory accounting for small businesses is an important, although highly technical, element of the Act. Especially in times of high inflation, inventory accounting can be a principal determinant of whether or not small business tax liabilities accurately reflect real increases in taxable income. In the case of labor intensive small businesses, inventory costs are even more important than depreciation deductions and are the principal investment activity.

Under current conditions, small businesses fail to make proper adjustment for the effect of inflation in producing illusory, though taxable, profits. This occurs because inventory systems based on the historical cost of inventory, such as the first-in-first-out method (FIFO), yield artificially low "cost of goods sold" figures and, therefore, artificially high nominal taxable income. Businesses thus incur high tax liabilities but replace those inventories at current prices, causing some of the previous nominal taxable income to vanish.

On this basis, many larger businesses are converting to the more realistic LIFO method of inventory accounting so as to make reported inventory costs more relevant to actual replacement costs. However, the majority of smaller businesses will not convert to LIFO, because the LIFO rules are very complex and because there are various one-time additional and adverse consequences associated with conversion. Thus, they are forced to operate under a most inequitable system of inventory tax rules, which have little relevance for true inventory costs and which materially damage their ability to retain earnings for capital investment and productivity growth.

Inventory accounting simplification, like depreciation simplification and acceleration, will substantially improve capital retention by small businesses. While depreciation simplification focuses on the capital needs of capital intensive small businesses, inventory accounting simplification primarily benefits small businesses.

F. Other Business Provisions With a Small Business Impact

1. Stock Options

In 1976 the Congress enacted a provision that would phase-out stock option plans. At the time it was felt that richer individuals were being given an unfair tool to defer income. Many small businesses, especially high technology and other large growth potential companies, complained that the loss of this provision removed a device that could be used to hire or retain key individuals and they strongly pushed for reinstatement.

The Act reinstates the stock options provision of prior law. Under the new provision, there will be no tax consequences when an incentive stock option is purchased, or when the employee exercises the option. The employee will be taxed at capital gains rates when the stock received on exercising the option is sold. The employee must not dispose of the stock within two years after the option is granted and must hold the stock for one year to get long-term capital gains treatment.

This provision should be helpful in increasing the ability of small businesses operating in corporate form to attract and retain key management personnel who might otherwise leave by providing the opportunity for them to acquire an interest in the business. Enabling the management of a business to have a proprietary interest in its profitable operation will encourage expansion and development of the business.

2. Targeted Jobs Tax Credit

In 1977 the so-called New Jobs Tax Credit (NJTC) was enacted. It was a tax credit tied to the incremental increase in payrolls and number of employees with a maximum available credit of \$200,000 per employer. In 1978 this credit was changed from a general to a targeted credit that applied to seven groups of people who were considered disadvantaged or difficult to place in jobs. The provision now passed has renewed the credit for one year.

Testimony by the Treasury Department on the subject indicated that a significant amount of the credit went to cooperative education students, and about two-thirds of employers applied for it retroactively, i.e., hiring an individual and later discovering the worker qualified for the credit. Thus, under the new law, retroactive certifications are eliminated and only cooperative education students who are also economically disadvantaged will be eligible for the credit. Also, AFDC, WIN registrants and Vietnam veterans are now also eligible to receive the credit.

From a small business standpoint, the original jobs tax credit was useful even though small business was not the main beneficiary of the provision. The targeted credit, while useful, was less helpful. The repeal of the NJTC eliminated one of the few provisions that encouraged labor rather than capital investments.

3. Employee Stock Ownership Plans (ESOPs)

In the past, the investment-based tax credit for ESOPs has prevented many labor intensive corporations from establishing such plans. The Act reorients the ESOP rules to payroll costs in contrast to investment in property.

In addition, the Act liberalizes the rules that allow an employer to deduct contributions to a leveraged ESOP, which is one that borrows to purchase employer securities. The limit for deductible contributions has also been increased. Under the Act, amounts contributed by an employer to a leveraged ESOP and applied by the plan to the payment of principal incurred to purchase employer securities will be subject to a deduction limitation of 25 percent of the participants' compensation. For amounts applied to interest on the loan, the deduction is unlimited.

These changes should make ESOPs more available for small businesses.

4. Windfall Profit Tax and Other Energy Provisions

The Act made a number of changes in the Windfall Profit Tax

and other energy provisions that will provide some benefits to certain energy-related small businesses.

First, independent producers, who after December 30, 1980, obtain oil from stripper wells which produce 10 barrels or less of oil each day for 12 consecutive months, will now have their oil taxed at the 30 percent rather than the 60 percent rate.

Second, the tax rate on newly discovered oil is to be decreased from the current 30 percent rate to 15 percent over a five year period as follows:

1981	30%
1982	27 ½%
1983	25%
1984	22 ½%
1985	20%
1986 and Thereafter	15%

Thus, small businesses that own or are involved in the production of petroleum properties will get relief from certain aspects of the windfall profits tax.

5. *Leases*

Under prior law, three-party financing leases ("leverage" leases) were widely used to transfer tax benefits from lessees, who didn't have enough tax liability to absorb them, to lessors who could. This took place even though such leases were subject to restrictive IRS guidelines and unclear court decisions. The Act reflects the view that leverage leases are an appropriate vehicle to facilitate the transfer of depreciation benefits and investment tax credits and should be made more available. Thus, it establishes a safe harbor for leasing transactions that provides an exception to current judicial and administrative guidelines controlling them. Provided its conditions are satisfied, the new provision guarantees that a transaction will be characterized as a lease for purposes of allowing investment credits and capital cost recovery allowances to the nominal lessor. Lessors will be able to receive cost recovery allowances and investment tax credits with respect to qualified leased property. At the same time, it is expected that lessees will receive a very significant portion of the benefits of these tax advantages through reduced rental charges for the property, or cash payments and/or reduced rental charges in the case of sale-leaseback transactions.

Recent evidence seems to indicate that the prime beneficiaries of this provision will initially be the larger corporations that have substantial losses, for example, the automotive manufacturers, who can receive cash benefits from the sale of their currently unusable tax attributes. The other direct beneficiaries will be those companies that have substantial taxable income. They would be able to buy equipment and lease it to corporations with little or no taxable income. The lessor would thus receive the immediate use of investment tax credits and depreciation allowances on the machines being leased. This would lower the lessor's taxable income and hence the tax liability. The lessee will be able to benefit from deducting rent payments attributable to the lease. These rental payments would be significantly less in many cases than the cost of purchasing a new piece of equipment. This leasing method can thus become another tax planning tool to reduce tax liability.

III. *Savings Provisions Impacting on Small Businesses*

A. *Tax-Exempt Savings Certificate*

The Act provides for the creation of a tax-exempt savings certificate. Under the terms of the provision, each taxpayer can exclude from income up to \$1,000 of interest income earned on the certificate. By its terms, the incentive is very attractive for taxpayers in the 30 percent or greater tax bracket. The certificates will pay interest at 70 percent of the Treasury rate and be free from Federal taxes. State income tax liability is dependent on each state's law. Issuing banks, thrifts and credit unions must use at least 75 percent of the certificate proceeds for residential financing and agricultural loans.

B. *Retirement Accounts*

The Act prohibits individual retirement account funds from being invested in so-called collectibles after 1981.

One purpose of individual retirement (Keogh & IRA accounts) plans is to encourage capital formation by allowing individuals to invest various levels of funds tax-free to meet their retirement needs. Before the Act, this investment could be in securities or virtually any other assets—gold, jewels, art—items which contribute nothing to capital formation and are at times more in the nature of hobbies that are being given favorable tax treatment. Small businesses will benefit from the greater emphasis on capital formation

under the Act. However, small businesses involved in the sale of collectibles may be adversely affected.

The Act also increases the deduction limit for contributions to defined contribution H.R. 10 plans, simplified employee pensions (SEPs), and Subchapter S plans to 15 percent of an individual's net earnings from self-employment up to \$15,000. The prior ceiling was \$7,500. The amount of compensation which may be taken into account to test for discrimination under these plans has been increased from \$100,000 to \$200,000. In order to provide a similar increase in the level of benefits permitted, the amount of compensation which may be taken into account for purposes of determining benefit accruals under defined benefit H.R. 10 and Subchapter S corporation plans has been increased from \$50,000 to \$100,000. In addition, the annual contribution limitations on Individual Retirement Accounts (IRAs) has been raised from the lesser of \$1,500 or 15 percent of compensation to the lesser of \$2,000 or 100 percent of compensation. The limit for spousal IRAs is increased from \$1,750 to \$2,250 provided the spouse has no compensation for the year and the couple files a joint return. These changes increase the ability of small businesspersons to provide adequate retirement benefits for themselves and/or their employees.

IV. Estate and Gift Tax Changes

The changes in the estate and gift tax rules made by this Act are the second major overhaul of these provisions in five years. When fully phased in, the changes made by the Act will greatly reduce the number of people and estates subject to the tax.

These changes will have a substantial beneficial impact on small business and should be regarded as one of the key elements of the Act from a small business standpoint. The estate tax is often perceived as being inequitable because pre-existing law often forced the sale of many family businesses or caused them to financially burden themselves to the point of threatening their viability in order to raise funds necessary to pay estate tax bills.

The following changes, all of which have a substantial small business significance, have been made in the estate and gift tax area:

1. Increase in Unified Credit

Estate and gift taxes were unified in 1976 into a single progressive rate structure that applies to cumulative gifts and bequests. A unified credit is allowed against gross estate and gift taxes. Under

the Act, the amount of the unified credit increases for all taxpayers; except nonresident aliens, from \$47,000 to \$192,800 over a six year period. Under prior law, the unified credit of \$47,000 operated to exempt from estate and gift tax transfers up to \$175,625. Under the Act, the portion of an estate exempt from taxation will be raised from the current \$175,625 to \$600,000 over the next six years, as follows:

Year	Amount of Estate Excluded from Tax
1981	\$175,625
1982	225,000
1983	275,000
1984	325,000
1985	400,000
1986	500,000
1987 and Thereafter	600,000

The Act also changes the estate tax filing requirements to reflect these changes.

These changes can be expected to exempt about 99.7 percent of future estates, thus exempting small and moderate-sized estates from estate and gift taxes. This increase in the exclusion more than compensates for prior inflation which caused bracket creep in the estate tax.

2. Tax Reduction

The maximum tax rate on a net estate is being lowered from the current 70 percent to 50 percent in five percent increments from 1982-86. Thus, for the estate which has a small business as a major asset, the increased exemption described above and the rate cut will substantially decrease potential estate tax liability.

3. Unlimited Marital Deductions

Under the Act, an unlimited estate and gift tax marital deduction will be allowed for transfers between spouses. In the past, the estate tax marital deduction was limited to the greater of \$250,000 or one-half of the decedent's adjusted gross estate, and the gift tax marital deduction was limited to the first \$100,000 of inter-spousal gifts and 50 percent of lifetime transfers in excess of \$200,000. The Act also allows a decedent's share of community property to qualify for the marital deduction, a transfer not qualifying under prior law. The Act also provides a terminable interest rule pursu-

MARGINAL UNIFIED ESTATE AND GIFT TAX RATES

For Taxable* Estates Above	1981	1982	1983	1984	1985	1986	1987
\$ 175,625	32%	32%	-	-	-	-	-
250,000	34%	34%	34%	34%	34%	-	-
500,000	37%	37%	37%	37%	37%	37%	37%
750,000	39%	39%	39%	39%	39%	39%	39%
1,000,000	41%	41%	41%	41%	41%	41%	41%
1,250,000	43%	43%	43%	43%	43%	43%	43%
1,500,000	45%	45%	45%	45%	45%	45%	45%
2,000,000	49%	49%	49%	49%	49%	49%	45%
2,500,000	53%	53%	53%	53%	50%	50%	50%
3,000,000	57%	57%	57%	55%	50%	50%	50%

*To compute the exact tax liability this table must be used in conjunction with the exclusion table above.

ant to which transfers of certain terminable interests can qualify for the marital deduction (such as a trust with a life interest for a spouse with the remainder to the decedent's children), if a proper election is made.

The Act also substantially changes and simplifies the taxation of jointly held property. Under the Act, property held by spouses as tenants by the entirety or joint tenants with the right of survivorship will be considered to be owned one-half by each spouse for estate tax purposes, regardless of how much each spouse actually paid for the property. Thus, only one-half of the property is includable in the estate and the other one-half will be transferred tax-free at the death of the first spouse.

These changes are of substantial benefit to small businesses. The marital deduction change will allow a spouse to receive a small business intact without any adverse Federal estate (or gift) tax consequences. This change, in combination with those to the terminable interest and joint property rules will greatly increase estate planning possibilities for small businesses, thereby further reducing the impact of the estate tax on such entities.

4. *Current Use Valuation of Farms and Closely-Held Businesses*

Generally, real property is includible in a decedent's gross estate at its fair market value based on its highest and best use. However, under current law, real property used as a farm or as part of a closely-held business may be included in the decedent's gross estate at its current use value (generally below fair market value) provided certain requirements are met and an election to use such valuation is made. Under prior law, the gross estate could not be

reduced by more than \$500,000. Under the Act, the limitation on the reduction from fair market value is increased as follows:

YEAR OF DEATH	LIMITATION AMOUNT
1980	\$500,000
1981	600,000
1982	700,000
1983 and thereafter	750,000

In addition, the Act reduces the threshold requirements which must be met for the use of the provision. These changes, with the increase in the limitation amount, clearly broaden the scope and use of this provision in a manner highly beneficial for small business.

5. Time for Payment of Estate Tax Attributable to Closely-Held Interests

Under prior law, if the bulk of a decedent's estate consisted of an interest in a closely-held business or businesses, the estate could elect to defer tax liability for five years and pay the estate tax due in up to 10 yearly installments at a four percent interest rate. This provision is applied to a tax liability of up to \$1 million of estate small business assets.

Under the provisions of the Act, the portion of an estate that must consist of qualified assets has been reduced from 65 percent to 35 percent. In addition, this section is conformed with the current provision of the Code that allows the redemption of stock at favorable long-term capital gains rates to meet estate tax liabilities. These changes will expand the availability of this provision for small businesses.

6. Gift Tax Exclusion

The annual gift tax exclusion is raised from the current \$3,000 to \$10,000 per year per person. This will allow small business owners to pass on portions of their business to their heirs tax-free while they are still alive.

7. Transfers Within Three Years of Death

Under prior law, gifts made by a decedent within three years of death were included in the decedent's estate. Under the Act, such gifts are no longer included in the gross estate except for certain

limited purposes. Gifts of life insurance and certain transfers with retained interests remain subject to the three year rule. This provision will increase estate planning flexibility for small businesses.

8. Basis of Property Received Within One Year of Death

Under prior law, the basis of property passing from a decedent was generally the fair market value at the date of death. As a result of this step-up in basis, any appreciation would avoid income tax. Consequently, a donor could make a gift to a dying individual and then have the property transferred back and get the stepped-up basis.

Under the Act, this step-up is barred. The stepped-up basis rules do not apply if the property is acquired by the decedent by gift within one year of death, if the property transfers, directly or indirectly, from the donee-decedent to the donor or the donor's spouse. This provision will inhibit certain small business estate planning techniques.

V. Tax Provisions of Special Import to Innovative Businesses

1. A 25 percent tax credit is allowed, an *increase* from a base period of certain eligible research and experimental expenditures related to a firm's business. For out-of-house contracts or grants to universities, 65 percent of the amount will be eligible. This provision, plus the first right of refusal to universities provided by P.L. 96-517 to inventions they make in performance of government grants and contracts, has already created an explosion of interest in collaborative R&D efforts with universities. One major university reports that such interest has quadrupled in the last six months.

2. The amount which a taxpayer may deduct for contributing new scientific equipment to a university or college for use in research or science education is increased to the cost of making the equipment plus half of the profit the taxpayer would have made by selling the equipment at market value (up to twice the cost of making the equipment).

3. Section 861 of the Internal Revenue Service regulations, which requires that if a company has foreign income, a portion of domestic R&D expenses must be treated as if it were spent abroad, and not deducted from U.S. income as a business expense, is suspended for two years. All domestic R&D expenses can now be deducted from U. S. income.

APPENDIX F

PROCUREMENT FROM SMALL, MINORITY-OWNED AND WOMEN-OWNED BUSINESSES

APPENDIX F—FEDERAL PROCUREMENT FROM SMALL, MINORITY-OWNED, AND WOMEN-OWNED BUSINESSES

Introduction

In FY 1980, Federal Government procurement of goods and services amounted to \$110,246,822,000 in contract actions. Of this amount, 90.40 percent (\$99,661,412,000) was accounted for by contract actions of more than \$10,000.

Contract actions are more numerous than contracts; i.e., one contract may involve more than one contract action. The various kinds of contract actions are:

- Initial letter contracts
- Definitive contracts superseding letter contracts
- New definitive contracts
- Orders under reporting agency's contract
- Modifications.
- GSA Federal Supply Schedule
- Orders under another agency's contract
- Terminations for default
- Terminations for convenience

Contract actions may involve obligation or deobligation of funds. The reported data may also be in the form of corrections to previously reported data. However, problems associated with the completeness and timeliness of agency data encountered during the start-up of the Federal Procurement Data System have been significantly reduced.

Prime Contracts by Agency

Table F.1 contains the dollar volume in prime contract actions over \$10,000 by agency, and each agency's awards to small, minority-owned, and female-owned businesses in FY 1980. A total of 54 agencies are reported for such procurement in FY 1980, the dollar volumes ranging from \$76,018,037,000 for the Department of Defense to \$33,000 for the National Capital Planning Commission. Total small business received \$14.8 billion, including \$10.6

TABLE F.1—Federal prime contract actions over \$10,000 by agency to small, minority-owned, and female-owned business, FY 1980

[thousands of dollars]

Agency	Total	Small Business	Minority-Owned Business	Female-Owned Business
Total	99,661,412	14,807,595	1,914,965	337,599
Executive Office of the President	2,983	898	—	76
Department of Agriculture	2,030,293	1,178,516	58,938	0,694
Department of Commerce	220,768	94,002	24,604	2,578
Department of Defense	76,018,037	10,644,981	1,097,328	216,239
Department of Education	31,841	6,005	4,611	179
Department of Energy	7,883,483	302,308	59,975	3,422
Department of Health and Human Services	1,076,401	229,949	102,115	18,740
Department of Housing and Urban Development	59,421	13,834	3,676	182
Department of the Interior	1,353,790	415,909	194,368	10,423
Department of Justice	118,031	33,404	7,885	716
Department of Labor	332,208	66,698	22,667	2,613
Department of State	52,516	14,041	5,646	572
Department of Transportation	1,221,388	315,376	87,328	11,814
Department of the Treasury	262,044	25,604	7,769	75
Action	12,902	6,240	2,787	321
Administrative Conference of the U.S.	128	128	—	—
American Battle Monuments Commission	49	—	—	—
Arms Control and Disarmament Agency	3,052	847	50	—
Board for International Broadcasting	112	112	—	—
Civil Aeronautics Board	1,978	953	472	10
Commission on Civil Rights	215	133	126	30
Commodity Futures Trading Commission	1,909	21	—	—
Community Services Administration	2,042	1,098	1,073	—
Consumer Product Safety Commission	5,487	1,293	1,069	30
Environmental Protection Agency	358,867	143,527	15,445	1,993
Equal Employment Opportunity Commission	15,374	1,772	1,289	—
Federal Communications Commission	5,617	2,704	135	25
Federal Election Commission	733	53	—	—
Federal Emergency Management Agency	170,820	44,460	2,737	3,859
Federal Maritime Commission	300	198	33	—
Federal Trade Commission	2,491	426	5	32
General Services Administration	1,213,410	395,563	46,453	15,615
International Communication Agency	13,771	4,338	1,513	209
International Development Cooperation Agency	228,480	38,304	18,801	7,037
International Trade Commission	389	42	—	—
Interstate Commerce Commission	5,653	1,537	213	—
National Aeronautics and Space Administration	4,324,019	314,903	67,317	8,682
National Capital Planning Commission	33	14	14	—
National Foundation on the Arts and the Humanities	1,871	265	78	268
National Mediation Board	1,741	1,679	—	—
National Science Foundation	156,403	4,356	475	998
National Transportation Safety Board	595	295	200	200
Nuclear Regulatory Commission	36,760	15,763	3,358	224
Occupational Safety and Health Review Commission	418	142	—	—
Office of Personnel Management	576,954	-74,252	182	117
Pennsylvania Avenue Development Corporation	10,540	8,011	381	—
Railroad Retirement Board	2,502	720	—	—
Securities and Exchange Commission	3,471	1,207	15	—
Selective Service System	4,924	1,191	—	—

TABLE F.1—Continued

Small Business Administration	22,436	15,332	9,112	1,465
Smithsonian Institution	16,008	8,362	40	193
Tennessee Valley Authority	802,199	177,303	7,491	4,076
Veterans Administration	993,456	346,926	57,191	13,892
Water Resources Council	99	99	—	—

Source: Federal Procurement Data Center Special Report 623B of 24 April 1981.

billion at the Department of Defense and \$1.2 billion at the Department of Agriculture. Minority-owned business, including large minority firms, received \$1.9 billion, ranging from \$1.1 billion at the Department of Defense to zero at 12 agencies. Small and large businesses owned by women, which are particularly difficult to identify, received \$338 million, ranging from \$216 million at the Department of Defense to zero at 19 agencies.

Subcontracts by Agency

Table F.2 contains subcontracts by agency to small and minority-owned business in FY 1980. The subcontracts, which are in some cases estimated, and are in addition to the prime contract actions over \$10,000 in Table F.1, are for construction prime contracts over \$1,000,000 and other prime contracts over \$500,000. The agencies listed are the top 20 agencies in terms of prime contract actions over \$10,000, after omission of the Office of Personnel Management due to the nature of the subcontracts data. Subcontracts were \$13.3 billion to small business and \$748 million to minority-owned business.

Shares of Prime Contracts by Agency

Table F.3 contains the FY 1980 shares of small, minority-owned, and female-owned business for the 40 agencies with the greatest dollar volume of prime contract actions over \$10,000, comprising over 99.99 percent of the total dollar volume of such Federal procurement.

Small business as a whole received 14.86 percent of the total. The largest relative user of small business was the Pennsylvania Avenue Development Corporation at 76.01 percent, followed by the Small Business Administration at 68.34 percent, the Department of Agriculture at 58.05 percent, the Community Services Administra-

TABLE F.2—Subcontracts by agency to small and minority-owned business, FY 1980
[thousands of dollars]

Agency	Subcontracts To		
	Prime Contract Actions Over \$10,000	Small Business	Minority- Owned Business
Total, Top 20 Agencies	98,907,875	13,319,882	748,173
Department of Defense	76,018,037	10,823,652	452,296
Department of Energy	7,883,483	1,432,032	161,200
National Aeronautics & Space Administration	4,324,019	430,923	42,925
Department of Agriculture	2,030,293	59,748	5,400
Department of the Interior	1,353,790	105,369	15,086
Department of Transportation	1,221,388	60,600	25,600
General Services Administration	1,213,410	214,970	11,634
Department of Health, Education, and Welfare	1,108,242	37,950	9,128
Veterans Administration	993,456	56,800	7,800
Tennessee Valley Authority	802,199	39,200	10,900
Environmental Protection Agency	358,867	6,000	2,050
Department of Labor	332,208	25,700	2,812
Department of the Treasury	262,044	238	16
International Development Cooperation Agency	228,480	3,893	—
Department of Commerce	220,768	4,154	360
Federal Emergency Management Agency	170,820	740	111
National Science Foundation	156,403	14,069	495
Department of Justice	118,031	44	44
Department of Housing and Urban Development	59,421	3,800	316
Department of State	52,516	—	—

Note: The Office of Personnel Management has been omitted and the Department of Education combined with the Department of Health and Human Services, due to the nature of the subcontracts data. Subcontracts are for construction prime contracts over \$1,000,000 and other prime contracts over \$500,000.

Sources: Prime contract actions over \$10,000 are from Federal Procurement Data Center Special Report 623B of 24 April 1981. Department of Defense subcontracts are from "Companies Participating in the Department of Defense Subcontracting Program, 4th Quarter, FY 1980" by the Directorate for Information, Operation and Reports (DIOR). Civilian agency subcontracts are from identical letters of 27 May 1981, from Michael Cardenas, Administrator of the Small Business Administration, to Senator Lowell P. Weicker, Jr., and Representative Parren J. Mitchell.

tion at 53.77 percent, and the Smithsonian Institution at 52.24 percent. Five other agencies were between 40 and 50 percent.

Small minority-owned business received 1.74 percent of the total. The largest relative user of small minority-owned business was the Community Services Administration, which gave 52.55 percent of its dollar volume to such businesses. The next largest relative user was the Small Business Administration at 40.01 percent, followed by the Civil Aeronautics Board at 23.86 percent, Action at 21.60 percent, the Consumer Product Safety Commission at 19.48 percent, the Department of Education at 14.48 percent, and the Department of Commerce at 10.54 percent. Nine other agencies were between 5 and 10 percent.

TABLE F.3—Share of small, minority-owned, and female-owned business in Federal prime contract actions over \$10,000 by agency, FY 1980

Agency	Prime Contract Actions Over \$10,000 (thousands of dollars)	Small Business (percent)			Minority-Owned Business (percent)		Female-Owned Business (percent)
		Minority-Owned	Other	Total	Large	Total	
Total	\$99,661,412	1.74	13.12	14.86	0.18	1.92	0.34
Department of Defense	\$76,018,037	1.38	12.63	14.00	0.07	1.44	0.28
Department of Energy	7,883,483	0.76	3.07	3.83	0.00	0.76	0.04
National Aeronautics and Space Administration	4,324,019	1.55	5.73	7.28	0.01	1.56	0.20
Department of Agriculture	2,030,293	2.79	55.26	58.05	0.11	2.90	0.53
Department of the Interior	1,353,790	6.87	23.85	30.72	7.48	14.36	0.77
Department of Transportation	1,221,388	6.61	19.21	25.82	0.54	7.15	0.97
General Services Administration	1,213,410	3.79	28.81	32.60	0.04	3.83	1.29
Department of Health and Human Services	1,076,401	9.07	12.29	21.36	0.42	9.49	1.74
Veterans Administration	993,456	5.73	29.19	34.92	0.03	5.76	1.40
Tennessee Valley Authority	802,199	0.63	21.47	22.10	0.30	0.93	0.51
Office of Personnel Management	576,954	0.03	12.90	12.87	—	0.03	0.02
Environmental Protection Agency	358,867	4.27	35.72	39.99	0.03	4.30	0.56
Department of Labor	332,208	6.70	13.37	20.08	0.12	6.82	0.79
Department of the Treasury	262,044	2.53	7.24	9.77	0.44	2.96	0.03
International Development Cooperation Agency	228,480	7.63	9.13	16.76	0.60	8.23	3.08
Department of Commerce	220,768	10.54	32.04	42.58	0.60	11.14	1.17
Federal Emergency Management Agency	170,820	1.60	24.43	26.03	0.00	1.60	2.26
National Science Foundation	156,403	0.30	2.48	2.79	—	0.30	0.64
Department of Justice	118,031	4.99	23.31	28.30	1.69	6.68	0.61
Department of Housing and Urban Development	59,421	6.19	17.09	23.28	—	6.19	0.31
Department of State	52,516	1.86	24.88	26.74	8.89	10.75	1.09
Nuclear Regulatory Commission	36,760	8.62	34.26	42.88	0.52	9.13	0.61
Department of Education	31,841	14.48	4.38	18.86	—	14.48	0.56
Small Business Administration	22,436	40.01	28.33	68.34	0.61	40.61	6.53
Smithsonian Institution	16,008	0.25	51.99	52.24	—	0.25	1.21

TABLE F.3—Continued

Agency	Prime Contract Actions Over \$10,000 (thousands of dollars)	Small Business (percent)			Minority- Owned Business (percent)		Female- Owned Business (percent)
		Minority- Owned	Other	Total	Large	Total	
Equal Employment Opportunity Commission	15,374	8.38	3.14	11.53	—	8.38	—
International Communication Agency	13,771	0.22	31.28	31.50	10.77	10.99	1.52
Action	12,902	21.60	26.76	48.36	—	21.60	2.49
Pennsylvania Avenue Development Corporation	10,540	3.61	72.39	76.01	—	3.61	—
Interstate Commerce Commission	5,653	3.77	23.42	27.19	—	3.77	—
Federal Communications Commission	5,617	2.40	45.74	48.14	—	2.40	0.45
Consumer Product Safety Commission	5,487	19.48	4.08	23.56	—	19.48	0.55
Selective Service System	4,924	—	24.19	24.19	—	—	—
Securities and Exchange Commission	3,471	0.43	34.34	34.77	—	0.43	—
Arms Control and Disarmament Agency	3,052	1.64	26.11	27.75	—	1.64	—
Executive Office of the President	2,983	—	30.10	30.10	—	—	2.55
Railroad Retirement Board	2,502	—	28.78	28.78	—	—	—
Federal Trade Commission	2,491	0.20	16.90	17.10	—	0.20	1.28
Community Services Administration	2,042	52.55	1.22	53.77	—	52.55	—
Civil Aeronautics Board	1,978	23.86	24.32	48.18	—	23.86	0.51
Other 14 Agencies	8,592	4.63	32.45	37.08	0.62	5.25	5.80

Source: Federal Procurement Data Center Special Report 623B of 24 April 1981.

Other small business received 13.12 percent of the total. The largest relative user of other small business was the Pennsylvania Avenue Development Corporation, which gave 72.39 percent of its dollar volume to such businesses, followed by the Department of Agriculture at 55.26 percent, the Smithsonian Institution at 51.99 percent, and the Federal Communications Commission at 45.74 percent. Six other agencies were between 30 and 40 percent.

Large minority-owned business received 0.18 percent of the total. Three agencies used large minority-owned businesses for more than 7 percent of their dollar volumes: the International Communication Agency at 10.77 percent, the Department of State at 8.89 percent, and the Department of the Interior at 7.48 percent. With the exception of the Department of Justice at 1.69 percent, all other agencies were below 1 percent.

Minority-owned business as a whole received 1.92 percent of the total. The largest relative users of minority-owned business were the Community Services Administration at 52.55 percent, the Small Business Administration at 40.61 percent, the Civil Aeronautics Board at 23.86 percent, Action at 21.60 percent, the Consumer Product Safety Commission at 19.48 percent, the Department of Education at 14.48 percent, and the Department of the Interior at 14.36 percent. Three other agencies were between 10 and 14 percent.

Female-owned business received 0.34 percent of the total. The largest relative user of female-owned business was the Small Business Administration at 6.53 percent, followed by the International Development Cooperation Agency at 3.08 percent, the Executive Office of the President at 2.55 percent, Action at 2.49 percent, and the Federal Emergency Management Agency at 2.26 percent. Eight other agencies were between 1 and 2 percent.

Share of Prime Contracts by Product/Service

Table F.4 contains the FY 1980 shares of small, small minority-owned, and female-owned business in prime contract actions over \$10,000, classified by product/service rather than by agency. Shares are also given for the subtotals of research and development (R&D), other services, and supplies and equipment. The shares of R&D are in each case the lowest, with the shares of other services the highest, and the supplies and equipment shares in between.

The share of total small business was greater than 70 percent in four categories: 79.83 percent in clothing, individual equipment,

TABLE F.4—Federal prime contract actions over \$10,000 by product/service to small, small minority-owned, and female-owned business, FY 1980

Product/Service	Prime Contract Actions Over \$10,000 (thousands of dollars)	Total Small Business (percent)	Small Minority- Owned Business (percent)	Female-Owned Business (percent)
Total	99,661,412	14.86	1.74	0.34
Subtotal, Research and Development	14,318,089	6.73	0.65	0.13
Agriculture	4,839	23.74	—	—
Community Services & Development	8,942	22.15	15.60	1.23
Defense Systems	6,636,924	3.77	0.18	0.05
Defense-Other	1,205,142	20.04	0.63	0.23
Economic Growth & Productivity	25,822	4.28	0.64	0.28
Education	104,858	6.46	3.38	0.62
Energy	967,631	8.49	1.75	0.10
Environment	208,994	37.45	3.50	0.65
General Science & Technology	118,906	6.25	0.32	—
Housing	17,418	-0.99	-3.07	—
Income Security	557	18.31	—	—
International Affairs & Cooperation	2,337	4.75	—	—
Medical	456,226	8.04	1.14	0.13
Natural Resources	14,933	38.60	0.39	0.24
Social Services	1,882	—	—	—
Space	3,158,142	2.17	0.25	0.12
Transportation	128,867	36.52	9.02	1.01
Mining	34,979	42.89	5.82	0.94
Other Research & Development	1,220,690	9.80	1.50	0.24
Subtotal, Other Services & Construction	33,838,278	20.02	3.25	0.56
Natural Resources Management	316,044	28.83	3.33	0.62
Social Services	749,137	4.23	0.18	0.07
Quality Control, Testing & Inspection	162,664	10.24	0.60	0.05
Maintenance, Repair & Rebuilding of Equipment	3,142,145	18.10	0.88	0.45
Modification of Equipment	949,906	2.95	0.25	0.02
Technical Representative Services	795,031	7.31	0.56	0.19
Operation of Government-Owned Facilities	6,953,751	0.73	0.14	0.05

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TABLE F.4—Continued

Product/Service	Prime Contract Actions Over \$10,000 (thousands of dollars)	Total Small Business (percent)	Small Minority- Owned Business (percent)	Female-Owned Business (percent)
Installation of Equipment	82,954	23.90	6.31	1.24
Salvage Service	16,708	50.25	2.18	0.10
Dependent Medicare Services	5,019	—	—	—
General Health Care Services	109,239	19.72	10.84	2.88
Laboratory Testing Services	10,779	35.26	—	—
Nursing & Nursing Home Care	45,179	72.86	0.21	1.77
Specialized Medical Services	31,412	35.61	7.37	0.10
Other Medical Services	40,755	23.52	4.88	1.75
Architect & Engineer Services	1,489,083	25.87	2.22	0.33
Automatic Data Processing Services	646,762	21.75	9.14	0.84
Management & Professional Services	2,678,605	15.39	4.93	1.35
Special Studies & Analyses	918,894	27.73	5.17	0.75
Utilities	2,808,342	0.20	0.02	0.00
Housekeeping Services	841,748	77.91	34.83	2.31
Photography, Mapping, Printing & Publishing	88,242	-21.79	22.03	3.99
Training Services	605,049	13.56	3.84	4.44
Transportation & Travel	1,401,277	17.96	0.49	0.89
Lease or Rental of Equipment	564,518	15.23	1.30	0.24
Lease or Rental of Facilities	163,015	49.23	1.36	2.19
Construction of Structures & Facilities	5,963,851	32.84	3.43	0.34
Maintenance, Repair & Alteration of Real Property	2,258,169	67.63	8.48	1.01
Subtotal, Supplies & Equipment	51,505,045	13.73	1.05	0.25
Weapons	710,845	14.43	4.66	0.16
Nuclear Ordnance	614,571	0.43	0.02	0.01
Fire Control Equipment	774,861	4.65	0.07	0.09
Ammunition & Explosives	1,529,871	14.82	1.63	0.18
Guided Missiles	3,951,918	1.38	-0.00	0.01
Aircraft & Airframe Structural Components	7,328,865	1.40	0.10	0.02

TABLE F.4—Continued

Product/Service	Prime Contract Actions Over \$10,000 (thousands of dollars)	Total Small Business (percent)	Small Minority- Owned Business (percent)	Female-Owned Business (percent)
Aircraft Components & Accessories	766,118	12.67	0.24	0.12
Aircraft Launching, Landing & Ground Handling Equipment	148,171	66.23	1.85	0.44
Space Vehicles	60,226	1.45	0.27	0.02
Ships, Small Craft, Pontoons & Floating Docks	3,361,877	2.69	0.16	0.03
Ship & Marine Equipment	80,018	47.05	1.68	0.19
Railway Equipment	11,997	18.03	2.65	—
Ground Effect & Motor Vehicles, Trailers & Cycles	1,283,467	6.66	0.93	0.19
Tractors	43,456	16.02	—	2.27
Vehicular Equipment Components	446,187	29.75	1.15	1.47
Tires & Tubes	65,685	28.91	—	—
Engines, Turbines & Components	3,932,546	2.34	0.05	0.04
Engine Accessories	620,521	9.26	0.26	0.21
Mechanical Power Transmission Equipment	58,879	36.18	0.50	0.54
Bearings	73,947	13.09	0.22	0.21
Woodworking Machinery & Equipment	1,601	26.42	—	—
Metalworking Machinery	283,474	15.67	0.09	0.37
Service & Trade Equipment	16,500	56.95	0.92	0.09
Special Industrial Machinery	110,906	15.92	0.09	0.13
Agricultural Machinery & Equipment	7,898	45.10	1.35	6.50
Construction, Mining & Highway Maintenance Equipment	119,049	38.43	1.84	0.69
Materials Handling Equipment	163,800	30.35	0.54	0.39
Rope, Cable, Chain & Fittings	37,420	50.80	0.87	0.24
Refrigerating & Air Conditioning & Circulating Equipment	114,228	41.84	1.47	0.37
Fire Fighting, Rescue & Safety Equipment	142,677	51.88	1.36	0.57
Pumps & Compressors	156,534	23.74	1.93	0.94
Furnace, Steam Plant & Drying Equipment & Nuclear Reactors	322,118	8.73	0.02	0.06

TABLE F.4—Continued

Product/Service	Prime Contract, Actions Over \$10,000 (thousands of dollars)	Total Small Business (percent)	Small Minority- Owned Business (percent)	Female-Owned Business (percent)
Plumbing, Heating & Sanitation Equipment	31,218	61.68	9.77	1.37
Water Purification & Sewage Treatment Equipment	20,829	55.32	27.25	0.52
Pipe, Tubing, Hose & Fittings	111,459	36.70	0.99	0.91
Valves	107,344	45.60	0.43	0.15
Maintenance & Repair Shop Equipment	456,880	18.06	0.86	0.15
Hand Tools	23,613	45.56	2.75	1.82
Measuring Tools	5,814	44.93	0.88	—
Hardware & Abrasives	110,917	40.41	2.06	1.10
Prefabricated Structures & Scaffolding	80,671	43.99	0.60	0.60
Lumber, Millwork, Plywood & Veneer	41,262	72.80	0.09	6.78
Construction & Building Materials	121,605	32.07	1.02	8.40
Communication, Detection & Coherent Radiation Equip- ment	5,538,713	7.34	0.81	0.07
Electrical/Electronic Equipment Components	872,480	22.46	1.32	0.27
Fiber, Optics Materials, Components, Assemblies, & Accessories	157	—	—	—
Electric Wire & Power Distribution Equipment	612,738	23.42	2.68	0.95
Lighting Fixtures & Lamps	42,339	41.00	3.04	1.31
Alarm & Signal Systems	23,240	51.67	11.45	—
Medical, Dental & Veterinary Equipment & Supplies	514,554	15.01	0.74	1.14
Instruments & Laboratory Equipment	987,108	21.32	0.96	0.32
Photographic Equipment	122,635	17.49	0.31	0.28
Chemicals & Chemical Products	127,227	43.02	1.51	0.14
Training Aids & Devices	632,270	11.65	0.31	0.24
General Purpose ADP (Support) Equipment, Software & Supplies	760,767	22.28	2.97	0.24
Furniture	74,152	36.82	5.37	0.38
Household & Commercial Furnishings & Appliances	55,409	56.84	1.06	1.95

TABLE F.4—Continued

Product/Service	Prime Contract Actions Over \$10,000 (thousands of dollars)	Total Small Business (percent)	Small Minority- Owned Business (percent)	Female-Owned Business (percent)
Food Preparation & Serving Equipment	41,015	56.40	0.11	1.65
Office Machines & Visible Record Equipment	46,965	16.10	0.93	0.51
Office Supplies & Devices	120,915	38.58	0.45	5.49
Books, Maps & Other Publications	61,014	28.88	5.28	0.72
Musical Instruments, Phonographs & Hometype Radios	2,839	25.08	—	—
Recreational & Athletic Equipment	6,565	43.91	3.00	0.49
Cleaning Equipment & Supplies	63,590	37.48	—	—
Brushes, Paints, Sealers & Adhesives	78,681	35.02	2.74	0.08
Containers, Packaging & Packing Supplies	84,650	60.33	5.58	-0.05
Textiles, Leather, Furs, Apparel & Shoe Findings, Tents, & Flags	197,596	56.62	0.18	1.55
Clothing, Individual Equipment & Insignia	610,813	79.83	0.69	3.20
Toiletries	72,708	2.26	—	—
Agricultural Supplies	12,459	42.05	0.67	0.25
Live Animals	4,891	54.86	1.33	3.17
Subsistence	3,059,460	44.71	1.29	0.29
Fuels, Lubricants, Oils & Waxes	7,041,866	18.08	3.43	0.08
Nonmetallic Fabricated Materials	52,817	32.57	0.10	1.48
Nonmetallic Crude Materials	43,840	31.40	0.15	4.73
Metal Bars, Sheets & Shapes	207,875	22.38	1.16	1.08
Ores, Minerals & Their Primary Products	74,588	5.65	0.11	0.11
Miscellaneous	318,266	22.41	1.77	1.40

Source: Federal Procurement Data Center Special Report 699B of 23 July 1981.

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and insignia; 77.91 percent in housekeeping services; 72.86 percent in nursing and nursing home care; and 72.80 percent in lumber, millwork, plywood, and veneer.

The share of small minority-owned business was greater than 15 percent in four instances: 34.83 percent in housekeeping services; 27.25 percent in water purification and sewage treatment equipment; 22.03 percent in photography, mapping, printing, and publishing; and 15.60 percent in community services and development R&D.

The share of total female-owned business was greater than 5 percent in four categories: 8.40 percent in construction and building materials; 6.78 percent in lumber, millwork, plywood, and veneer; 6.50 percent in agricultural machinery and equipment; and 5.49 percent in office supplies and devices.

APPENDIX G

FEDERAL AGENCY SMALL BUSINESS OFFICES

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APPENDIX G—FEDERAL AGENCIES SMALL BUSINESS OFFICES

The following is an alphabetical listing of all government departments and independent agencies offering a variety of services to small business.

It is not intended to be a complete listing of all government programs from which small business may benefit, but is a good reference source to help small businesses pinpoint additional programs which may be of value.

AGENCY FOR INTERNATIONAL DEVELOPMENT (AID)

Personnel Locator: (202) 632-3628

Procurement: (703) 235-9813

Program: *Foreign Trade Opportunities*

Type of Aid: Information to U.S. Firms on AID-Funded Programs

Contact: Small Business Office-

Agency for International Development
Washington, D.C. 20523

Phone: (202) 235-1822

For information contact:

Mr. R.C. Malley

Director

Office of Small and Disadvantaged

Business Utilization

Agency For International Development

Washington, D.C., 20523

Phone: (202) 235-1822

DEPARTMENT OF AGRICULTURE

Personnel Locator: (202) 447-2791

Procurement: (202) 447-2547

For information contact:

Office of Small and Disadvantaged

Business Utilization

U.S. Department of Agriculture

14th and Independence Avenue, S.W.

Washington, D.C. 20250

Phone: (202) 447-7117

COMMERCE DEPARTMENT

Personnel Locator: (202) 377-2000

Procurement: (202) 377-2773

Office of Business Liaison

Program: *Business Assistance*

Contact: Business Assistance Staff

Office of Business Liaison

Department of Commerce

Washington, D.C. 20230

Phone: (202) 377-3176

Type of Aid: Counseling and Information

International Trade Administration

Program: *Interagency Conferences on Small Business Export and Investment*

Type of Aid: Export Assistance

Contact: Any ITA or SBA District Office

Program: *Minority Business Export Assistance*

Type of Assistance: Technical Assistance

Contact: Minority Business Export Assistance Staff

International Trade Administration

Department of Commerce

Washington, D.C. 20230

Phone: (202) 377-5776

Minority Business Development Agency

Program: *Bank Development*

Type of Aid: Management Training and Technical Assistance

Contact: MBDA Regional Offices

Program: *Business Development Organizations*

Type of Aid: Management Assistance

Contact: MBDA Regional Offices

Program: *Business Enterprise Development*

Type of Aid: Grants and Cooperative Agreements

Phone: (202) 377-3816

Program: *Capital Development*

Type of Aid: Management and Technical Assistance

Phone: (202) 377-3237

Program: *Construction Contractor Assistance Centers*

Type of Aid: Construction Contracting Assistance

Phone: (202) 833-1840

Program: *Contract Support Services*
Type of Aid: Specialized Services
Phone: (202) 377-3024

Program: *Minority Business Opportunity Committees*
Type of Aid: Procurement Assistance
Phone: (202) 377-5187

Program: *Research*
Type of Aid: Specialized Services for MBDA Clients
Phone: (202) 377-3163

For information contact:

Director

MBDA

Department of Commerce

Washington, D.C. 20210

Phone: (202) 377-5061

DEPARTMENT OF DEFENSE

Personnel Locator: (202) 697-1759

Procurement: (202) 697-1481

Office of Small and Disadvantaged

Business Utilization Contact:

Mrs. Norma Leftwich

Director

OSDBU

Department of Defense

The Pentagon, Room 2A340

Washington, D.C. 20307

Phone: (202) 694-1151

Air Force

Personnel Locator Civilian: (202) 695-4582

Personnel Locator Military: (202) 695-4803

Procurement: (202) 697-7764

Office of Small and Disadvantaged

Business Utilization Contact:

Mr. Donald Rellins

Director

OSDBU

Department of Defense

Department of the Air Force

Room 4C255—The Pentagon

Washington, D.C. 20330

Phone: (202) 697-4126

Army

Personnel Locator: (202) 697-8257

Procurement: (202) 274-6593

Office of Small and Disadvantaged

Business Utilization Contact:

Ms. Juanita Watts

Director

OSDBU

Department of Defense

Department of the Army

Room 2E577—The Pentagon

Washington, D.C. 20301

Phone: (202) 697-2868

Navy

Personnel Locator Civilian: (202) 695-4621

Personnel Locator Military: (202) 695-3667

Office of Small and Disadvantaged

Business Utilization Contact:

Mr. Richard D. Ramirez

Director

OSDBU

Department of Defense

Department of the Navy

Room 400

Building 5 Crystal Plaza

Washington, D.C. 20360

Phone: (202) 692-7122

Marine Corps

Personnel Locator Civilian: (202) 694-1300

Personnel Locator Military: (202) 694-2182

Procurement: (202) 694-2629

DEPARTMENT OF EDUCATION

Personnel Locator: (202) 245-3192

Procurement: (202) 245-8160

Office of Small and Disadvantaged

Business Utilization Contact:

Mr. Don Neenan

Acting Director

OSDBU

Department of Education
400 Maryland Avenue
ROB-3, Room 5910
Washington, D.C. 20202

Phone: (202) 245-8160

DEPARTMENT OF ENERGY

Personnel Locator: (202) 252-5000

Procurement: (202) 252-1370

Office of Small and Disadvantaged

Business Utilization Contact:

Mr. John Shepard

Director

OSDBU

Department of Energy

1000 Independence Avenue, S.W.

Washington, D.C. 20585

Phone: (202) 252-8201

Program: *Office of Minority Economic Impact*

Type of Aid: Loans, Grants, Research

Phone: (202) 252-8383

ENVIRONMENTAL PROTECTION AGENCY

Personnel Locator: (202) 382-2090

Procurement: (202) 382-2368

Program: *Minority Business Enterprise (MBE) Construction Grants*

Type of Aid: Contract Assistance

Program: *Women's Business Enterprise Procurement and Contracts
Management*

Type of Aid: Procurement Assistance

For information contact:

Bob Knox

Director

Office of Small and Disadvantaged

Business Utilization

U.S. Environmental Protection Agency

401 M Street, S.W.

Washington, D.C. 20460

Phone: (202) 755-0393

EXPORT-IMPORT BANK

Personnel Locator: (202) 566-4647

Procurement: (202) 566-8856

Program: *Minority Bank Export Sales Financing*

Type of Aid: Technical Assistance

Contact: Senior Loan Officer

Export-Import Bank

811 Vermont Avenue, N.W.

Washington, D.C. 20571

Phone: (202) 566-4687

Program: *Small Business Advisory Service*

Type of Aid; Export Counseling

Contact: Office of Public Affairs

Export-Import Bank

811 Vermont Avenue, N.W.

Washington, D.C. 20571

Phone: Toll-free hotline from 8:30 a.m. to 4:30 p.m.

(800) 424-5201 or 02

In Washington, D.C. phone: 566-8860

For Additional Information Contact:

Mr. Paul Stavrou

Director

Office of Small and Disadvantaged

Business Utilization

Export-Import Bank

811 Vermont Avenue, N.W.

Washington, D.C. 20571

Phone: (202) 566-8951

FEDERAL EMERGENCY MANAGEMENT AGENCY

Personnel Locator: (202) 287-0440

Procurement: (202) 287-3826

FEDERAL HOME LOAN BANK BOARD

For information contact:

Mr. Albert Cook

Director

Office of Small and Disadvantaged Business Utilization

Federal Home Loan Bank Board

1700 G Street, N.W.

Washington, D.C. 20552

Phone: (202) 377-6245

Program: *Federal Insurance Administration*

Type of Aid: Crime Insurance,

Flood Insurance, and

Urban Property Insurance [Riot Reinsurance and

Fair Access to Insurance Requirements (Fair) Plans]

Contact: Administrator
Federal Insurance Administration
Washington, D.C. 20410
Phone: (202) 287-0750

FEDERAL TRADE COMMISSION

Personnel Locator: (202) 523-3625

Procurement: (202) 376-7916

For information contact:

Mr. Robert Walton

Director

Office of Small and Disadvantaged Business Utilization

Federal Trade Commission

600 E Street, N.W.

Washington, D.C. 20435

Phone: (202) 376-7916

GENERAL SERVICES ADMINISTRATION

Personnel Locator: (202) 472-1082

Procurement (202) 472-1658

Program: *Business Service Centers*

Type of Aid: Procurement Assistance

Contact: Director of Business Services

General Services Administration

18th and F Streets, N.W.

Washington, D.C. 20405

Phone: (202) 566-1240

Program: *Sale of Federal Surplus Property*

Type of Aid: Purchasing Assistance

Contact: GSA Regional Field Offices

Region I

Business Service Center

General Services Administration

John W. McCormack Post Office and Courthouse

Boston, Massachusetts 02109

Region II

Business Service Center

General Services Administration

26 Federal Plaza

New York, New York 10007

Region III

Business Service Center (for MD, VA, WV, DC)
General Services Administration
7th and D Streets, S.W.
Room 1050
Washington, D.C. 20407

Region IV

Business Service Center
General Services Administration
Richard B. Russell Federal Building
U.S. Courthouse
75 Spring Street, S.W.
Atlanta, Georgia 30303

Region V

Business Service Center
General Services Administration
230 South Dearborn Street
Chicago, Illinois 60604

Region VI

Business Service Center
General Services Administration
1500 East Bannister Road
Kansas City, Missouri 64131

Region VII

Business Service Center (AR, LA, TX, NM, OK)
General Services Administration
819 Taylor Street
Fort Worth, Texas 76102
Gulf Coast Business Service Center (Gulf Coast
from Brownsville, Texas to New Orleans, LA)
General Services Administration
FOB Courthouse
515 Rusk Street
Houston, Texas 77002

Region VIII

Business Service Center
General Services Administration
Building 41
Denver Federal Center
Denver, Colorado 80225

Region IX

Business Service Center (No. CA, HI, NV except
Clark County)

General Services Administration
525 Market Street
San Francisco, California 94105

Business Service Center (Los Angeles, So. CA, Clark County,
NV, AZ)

General Services Administration
300 North Los Angeles Street
Los Angeles, California 90012

Region X

Business Service Center
General Services Administration
440 Federal Building
915 Second Avenue
Seattle, Washington 98174

For information contact:

Mr. William F. Madison
Director
Office of Small and Disadvantaged
Business Utilization
General Services Administration
Room 6002—18th and F Streets, N.W.
Washington, D.C. 20405

Phone: (202) 566-1021

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Personnel Locator: (202) 245-6296

Procurement: (202) 245-6313

Program: *Office of Human Development*

Type of Aid: Procurement

Contact: Chief, Contracts Branch

Office of Human Development Services
Department of Health and Human Services
200 Independence Avenue, S.W.
Washington, D.C. 20201

For additional information contact:

Richard Clinkscales
Director
Office of Small and Disadvantaged
Business Utilization

Department of Health and Human Services

200 Independence Avenue, S.W.

Room 624E

Washington, D.C. 20201

Phone: (202) 245-7300

Program: *Administrative Services Administration*

Type of Aid: Procurement

Contact: Chief, Procurement Branch

Material Management

Division of Administrative Services

National Institutes of Health

9000 Rockville Pike

Bethesda, Maryland, 20014

Phone: (301) 496-3181

Program: *Administrative Services Center*

Type of Aid: Procurement

Contact: Director

Division of Materiel Management

Administrative Services Center

5600 Fishers Lane

Rockville, Maryland 20857

Program: *Alcohol, Drug Abuse, and Mental Health Administration*

Type of Aid: Procurement

Contact: Small Business Specialist

Division of Block Grants and Contracts Management

Alcohol, Drug Abuse and Mental Health Administration

5600 Fishers Lane

Room 13C-12

Rockville, Maryland 20857

Small Business Specialist

Management Services Branch

National Institute on Drug Abuse

Parklawn Building, Room 10-49

5600 Fishers Lane

Rockville, Maryland 20857

Small Business Specialist

Grants and Contracts Management Branch

National Institute of Mental Health

Parklawn Building, Room 11A-10

5600 Fishers Lane

Rockville, Maryland 20857

General Supply Officer
USPHS Hospital
3100 Wyman Park Drive
Baltimore, Maryland 21211

General Services Officer
USPHS Hospital
15th Avenue and Lake Street
San Francisco, California 94118

Officer Services Manager
USPHS Hospital
210 State Street
New Orleans, Louisiana 70118

General Supply Officer
USPHS Hospital
Carville, Louisiana 70721

Supply Management Officer
USPHS Hospital
Bay and Vanderbilt Street
Stapleton, Staten Island, New York 10314

Contracting Officer
Oklahoma Area Indian Health Services
388 Old Post Office and Court House Building
Oklahoma City, Oklahoma 73102

Contracting Officer
Alaska Area Native Health Service
Box 7-741
Anchorage, Alaska 99410

Program: *Center for Disease Control*

Type of Aid: Procurement

Contact: Small Business Specialist

Center for Disease Control
255 East Pace Ferry Road, N.E.
Atlanta, Georgia 30305

Program: *Food and Drug Administration*

Type of Aid: Procurement

Contact: Small Business Specialist

Division of Contracts and Grants Management
Food and Drug Administration
5600 Fishers Lane
Rockville, Maryland 20857

Program: *Health Care Financing Administration*

Type of Aid: Procurement

Contact: Small Business Specialist

Division of Administration Management Services

Health Care Financing Administration

Post Office Box 7696

Baltimore, Maryland 21207

Program: *Health Resources Administration*

Type of Aid: Procurement

Contact: Small Business Specialist

Division of Grants and Procurement Management

Health Resources Administration

Center Building

3700 East-West Highway

Hyattsville, Maryland 20782

Program: *Health Services Administration*

Type of Aid: Procurement

Contact: Small Business Specialist

Office of Contracts and Grants,

Health Service Administration

5600 Fishers Lane

Room 12-21

Rockville, Maryland 20857

Contracting Officer

Aberdeen Area Indian Health Services

155-4th Avenue, S.E.

Aberdeen, South Dakota 57401

Contracting Officer

Albuquerque Area Indian Health Service

4005 Federal Office Building and

U.S. Court House

500 Gold Avenue, S.W.

Albuquerque, New Mexico 87101

Contracting Officer

Bemidji Program Office

203 Federal Building

Bemidji, Minnesota 56601

Director, Program Development

Indian Health Service

Post Office Box 11340

Tucson, Arizona 95734

Contracting Officer
Phoenix Area Indian Health Services
801 East Indian School Road
Phoenix, Arizona 85014

Contracting Officer
Portland Area Indian Health Service
Federal Building, Room 476
1220 S.W. 3rd Avenue
Portland, Oregon 97204

Contracting Officer
Navajo Area Indian Health Service
Post Office Box G
Window Rock, Arizona 86515

Program: *National Institutes of Health*

Type of Aid: Procurement

Contact: NIH Small Business Specialist
Division of Contracts and Grants
National Institutes of Health
Building 31, Room 1B-07
9000 Rockville Pike
Bethesda, Maryland 20814

Phone: (301) 496-4422

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Personnel Locator: (202) 755-5111

Procurement: (202) 755-5585

For information contact:

Ms. Bernice Williams

Director

Office of Small and Disadvantaged
Business Utilization

Department of Housing and Urban Development

7th and D Streets, S.W.

Room 10224

Washington, D.C. 20410

Phone: (202) 755-1428

DEPARTMENT OF INTERIOR

Personnel Locator: (202) 343-7220

Procurement: (202) 343-2105

Program: *Indian Business Enterprise Development*

Type of Aid: Quick Payments, Counseling and Technical
Information

Contact: Director
Indian Business Enterprise Division
Bureau of Indian Affairs
Department of Interior
Washington, D.C. 20245

Phone: (202) 343-4796

For information contact:

Charlotte Spann
Director
Small and Disadvantaged Business Utilization
Department of the Interior
C Street Between 18th and 19th Streets, N.W.
Room 5527
Washington, D.C. 20240

INTERNATIONAL COMMUNICATION AGENCY

For information contact:

Mr. Phillip Rogers
Director
Office of Small and Disadvantaged
Business Utilization
International Communication Agency
1717 H Street, N.W.
Room 613
Washington, D.C. 20547

Phone: (202) 653-5570

INTERSTATE COMMERCE COMMISSION

Personnel Locator: (202) 275-7414

Procurement: (202) 275-0893

Program: *Small Business Assistance Office*

Type of Aid: Counseling/Advisory Assistance

Contact: Director

Office of Small Business Assistance
Interstate Commerce Commission
12th Street and Constitution Avenue, N.W.
Washington, D.C. 20423

Phone: (202) 275-7597

DEPARTMENT OF JUSTICE

Personnel Locator: (202) 633-2000

Procurement: (202) 633-2948

For information contact:

Mr. Enos Roberts

Director

Office of Small and Disadvantaged Business Utilization

Department of Justice

10th Street and Pennsylvania Avenue, N.W.

Washington, D.C. 20530

Phone: (202) 633-5136

DEPARTMENT OF LABOR

Personnel Locator: (202) 523-8165

Procurement: (202) 523-6445

Occupational Safety and Health Administration (OSHA)

Program: *Consultation*

Type of Aid: Specialized Services

Contact: Assistant Secretary

OSHA

Department of Labor

Washington, D.C. 20210

Phone: (202) 523-9361

Program: *Small Business Assistance*

Type of Aid: Technical Assistance

Contact: Special Assistant for Small Business

Occupational Safety and Health Administration

Department of Labor

Washington, D.C. 20210

Phone: (202) 523-9148

Program: *Women's Bureau*

Type of Aid: Technical Assistance and Counseling

Contact: The Women's Bureau

Department of Labor

Washington, D.C. 20210

Phone: (202) 523-6611

For information contact:

Mr. Walter C. Terry

Director

Office of Small and Disadvantaged

Business Utilization

Department of Labor

Room S1032

200 Constitution Avenue, N.W.

Washington, D.C. 20210

Phone: (202) 523-9148

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Personnel Locator: (202) 755-2320

Procurement: (202) 755-2255

Program: *Small Business Program*

Type of Aid: Procurement

Contact: Small Business Advisor

National Aeronautics and Space Administration
Code K

Washington, D.C. 20546

Phone: (202) 755-2288

For information contact:

Mr. Eugene Rosen

Office of Small and Disadvantaged

Business Utilization

National Aeronautics and Space Administration

Attn: Code K

Washington, D.C. 20546

NATIONAL CREDIT UNION ASSOCIATION

For information, contact:

Mr. James R. Randolph, Jr.

Director

Office of Small and Disadvantaged

Business Utilization

National Credit Union Administration

1776 G Street, N.W.

Washington, D.C. 20456

NATIONAL LABOR RELATIONS BOARD

Personnel Locator: (202) 254-9167

For information contact:

Mr. Ernest Russell

Director

Office of Small and Disadvantaged

Business Utilization

National Labor Relations Board

1717 Pennsylvania Avenue, N.W.

Washington, D.C. 20570

Phone: (202) 254-9200

NUCLEAR REGULATORY COMMISSION

For information contact:

W.B. Kerr

Director

Office of Small and Disadvantaged

Business Utilization

Nuclear Regulatory Commission

Mail Stop 7217 MNBB

Washington, D.C. 20555

Phone: (202) 492-4665

NATIONAL SCIENCE FOUNDATION

Personnel Locator: (202) 357-9859

Procurement: (202) 357-7922

Program: *Small Business Innovation Research*

Type of Aid: Grants for Technological Innovation

Contact: National Science Foundation

Program Manager for Innovation and Small Business

Engineering and Applied Science: Directorate

1800 G Street, N.W.

Washington, D.C. 20550

Phone: (202) 357-7527

For information contact:

Mr. Theodore W. Wirths

Director

Office of Small and Disadvantaged Business Utilization

National Science Foundation

1800 G Street, N.W.

Washington, D.C. 20550

OFFICE OF PERSONNEL MANAGEMENT

For information contact:

Ms. Ann Brassier

Director

Office of Small and Disadvantaged Business Utilization

Office of Personnel Management

1900 E Street, N.W.

Room 5454

Washington, D.C. 20415

UNITED STATES POST OFFICE

For information contact:

Mr. Peter Evanko

Director

Office of Small and Disadvantaged Business Utilization

U.S. Postal Service

475 L'Enfant Plaza West, S.W.

Washington, D.C. 20260

RAILROAD RETIREMENT BOARD

For information contact:

Mr. Robert A. Russell

Director

Office of Small and Disadvantaged Business Utilization

Railroad Retirement Board

425-13th Street, N.W.

Washington, D.C. 20004

SECURITIES AND EXCHANGE COMMISSION

Personnel Locator: (202) 272-2550

Procurement: (202) 272-2559

Program: *Office of Small Business Policy*

Type of Aid: Technical Information

Contact: Securities and Exchange Commission

Office of Small Business Policy

Corporate Finance Division

500 North Capitol Street

Washington, D.C. 20349

Phone: (202) 272-2644

SMALL BUSINESS ADMINISTRATION

Personnel Locator: (202) 653-6600

Procurement Information: (202) 653-6635

Services: Management Assistance

Procurement Assistance

Financial Assistance

Contact: Small Business Administration

1441 "L" Street, N.W.

Washington, D.C. 20416

or any SBA District Office

Phone: (202) 653-6600

Program: *Office of Advocacy*

Type of Aid: Represents Small Business Interests Before Congress
and the Federal Agencies

Contact: Chief Counsel for Advocacy
Small Business Administration
1441 "L" Street, N.W.
Washington, D.C. 20416

Phone: (202) 653-6533

Program: *Minority Small Business and Capital Ownership Development*

Type of Aid: Minority Business Assistance

Contact: Associate Administrator

Minority Small Business and Capital Ownership
Development

Small Business Administration

1441 "L" Street, N.W.

Washington, D.C. 20416

Phone: (202) 653-6407

Program: *Women's Business Enterprise Division*

Type of Aid: Women's Business Assistance

Contact: Director

Women's Business Enterprise Division

Small Business Administration

1441 "L" Street, N.W.

Washington, D.C. 20416

Phone: (202) 653-6620

DEPARTMENT OF STATE

Personnel Locator: (202) 632-3685

Procurement: (202) 235-9531

For information contact:

Mr. Robert A. Cooper

Director

Office of Small and Disadvantaged Business Utilization

Department of State

Room 513 (SA-6)

Washington, D.C. 20520

DEPARTMENT OF TRANSPORTATION

Personnel Locator: (202) 426-4000

Procurement: (202) 426-4200

Federal Railroad Administration

Program: Minority Business Resources Center

Type of Aid: Technical Assistance and Procurement

Contact: Minority Business Resource Center

Federal Railroad Administration

Rm Plaza 4B, Nassif Building
400 7th Street, N.W.
Washington, D.C. 20591
Phone: (202) 426-2852

Program: *Federal Highway Administration*

Type of Aid: Procurement

Contact: Office of Contracts and Procurement

Federal Highway Administration

400 7th Street, S.W.

Washington, D.C. 20590

Phone: (202) 755-9370

For information contact:

Mr. Wilbert E. Cantey

Director

Office of Small and Disadvantaged Business Utilization

Department of Transportation

Room 10222, Nassif Building

400 Seventh Street, N.W.

Washington, D.C. 20590

DEPARTMENT OF THE TREASURY

Personnel Locator: (202) 566-2111

Procurement: (202) 376-0650

Program: *Minority Bank Deposit Program*

Type of Aid: Specialized Services

Contact: Director

Banking Staff

Bureau of Government Financial Operations

Treasury Department

Washington, D.C. 20226

Phone: (202) 566-4412

Program: *Small Business Tax Workshop*

Type of Aid: Technical Information

Contact: Field Programs Bureau

Taxpayer Service Division

1111 Connecticut Avenue, N.W.

Washington, D.C. 20224

Phone: (202) 566-2000

For information contact:

Ms. Linda Coffin

Director

Office of Small and Disadvantaged Business Utilization

Department of the Treasury
15th Street and Pennsylvania Avenue, N.W.
Washington, D.C. 20220

TENNESSEE VALLEY AUTHORITY

Personnel Locator: (615) 632-2101

Procurement: (615) 751-2827

Program: *Small Coal Operator Assistance Program*

Type of Aid: Purchasing Assistance

Contact: Division of Purchasing

Tennessee Valley Authority

Commerce Union Bank Building

Chattanooga, Tennessee 37401

Phone: (615) 751-0011

For information contact:

Mr. James L. Williams, Jr.

Director

Office of Small and Disadvantaged Business Utilization

Tennessee Valley Authority

1000 Commerce Union Bank Building

Chattanooga, Tennessee 37401

VETERANS ADMINISTRATION

Personnel Locator: (202) 393-4120

Procurement: (202) 389-2540

Program: *Procurement Opportunity*

Contact: Director

Office of Management Services

Veterans Administration

810 Vermont Avenue, N.W.

Washington, D.C. 20420

Phone: (202) 389-3616

For information contact:

Mr. Robert D. Vaughn

Director

Office of Small and Disadvantaged Business Utilization

Veterans Administration

810 Vermont Avenue, N.W.

Washington, D.C. 20420